

JOURNAL

OF THE AMERICAN SOCIETY OF
ARCHITECTURAL HISTORIANS



Vol. 3 Nos. 1-4

January-October 1943

The JOURNAL of
The American Society of Architectural Historians
Vol. 3, No. 1-2 January-April, 1943
Special Issue on the HISTORY OF CITY PLANNING

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Published by the Editor, Turpin C. Bannister,
at the Department of Architecture, in the
Rensselaer Polytechnic Institute, Troy, New York.

The AMERICAN SOCIETY of ARCHITECTURAL HISTORIANS

founded 1940

Aims:

1. To provide a useful forum and to facilitate enjoyable contacts for all those whose special interest is the History of Architecture.
2. To foster an appreciation and understanding of the great buildings and architects of historic cultures.
3. To encourage research in architectural history, and to aid in disseminating the results of such research.
4. To promote the preservation of significant architectural monuments.

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NOTICE OF 1943 ELECTION OF OFFICERS

Due to wartime restrictions of travel, ASAH directors and officers deemed it unwise to attempt to convene an Annual Meeting of ASAH in 1943. In lieu of such a formal meeting, members were provided with the President's Report of Activities and Finances covering the period January, 1941 - March, 1943. On appointment by the President, a Committee on Nominations, composed of Henry R. Hope, Chairman, Henry-Russell Hitchcock, and Marion Dean Ross, reported a slate of candidates, which, being accepted by the President, was submitted by ballot to members. Mr. Hope kindly acted as teller and reports that a very large percentage of ballots were received and that the slate was elected.

As retiring President, therefore, I hereby declare the following duly elected as officers and directors of the American Society of Architectural Historians for the year 1943:

Rexford Newcomb, President
John P. Coolidge, Vice President
Carroll L. V. Meeks, Secretary-Treasurer
Richard Krauthimer, Director, 1943-45
Turpin C. Bannister, Director, 1943-45
Charles E. Peterson, Director, 1943 (to
fill the unexpired term of Rexford
Newcomb)

It is appropriate at this time for the retiring President to voice his deep appreciation of the enthusiastic and unfailing cooperation which members have so generously bestowed during the infancy of ASAH. We have demonstrated beyond doubt that ASAH performs a unique and useful function, and the expression of confidence and sustained interest shown by the gratifying number of membership renewals and the constant influx of new applications for membership seems to assure a future full of promise. It is a source of satisfaction, too, that we can command the directive energies of so capable a group of leaders as our election has brought us, and I bespeak for them the continuation of the same loyal support that our members have given so bountifully in the past. There is much to do. Let us do it.

Turpin C. Bannister
Retiring President

A MESSAGE FROM OUR NEW PRESIDENT

Election to the presidency of the American Society of Architectural Historians constitutes a privilege and a challenge. Especially is this true in time of war. I feel deeply the honor conferred, but I am more concerned with the challenge which my election presents.

Under the leadership of the retiring president, firm foundations have been laid. It was hoped that for some years the Society might be privileged to make without the interruption the progress due so splendid an enterprise. Unfortunately we find ourselves involved in a war the magnitude of which has not heretofore been chronicled in human annals. We are part of a society that is devoting itself as completely as possible to the arts of war while our enterprise, if it is anything, is an enterprise of peace and begotten of the conditions of peace. Under such conditions, we must do everything possible to conserve what we have so far attained and to lay broad plans for development following the achievement of peace.

For a society no older than is ours, the roll of membership is an impressive one. In days and times like those which we face, it is important to keep that membership as nearly intact as possible. Some members are with the armed forces; others are engaged in important war work; many are for the time being diverted from their normal occupations having to do with historical and artistic matters. These are times when the Society and its splendid publication the Journal, may mean more to our members than in more normal times. It is important that each and every member, whether he be in a position to maintain active membership or not, keep in touch with the Society through the Journal and the Society's officers. We want to know where you may be, and, if possible, what you are about. News of you we shall want to relay to your confreres of the Society. Certainly you will want to know what is happening in the Society and with other Society members. Some of you are in lands and in contact with sights and scenes which are bound to enrich your artistic experiences and broaden your architectural horizons. If there are matters that would in your estimation be of interest for the Journal, report them, however brief, to Editor Bannister.

I believe it was Publilius who said, "We should provide in peace what we need in war." We are learning these days that the converse is just as true and perhaps more important, that in time of war we should prepare for peace and the benefits thereof. Thus, while during the period of actual warfare the Society may not make progress at the same rate that it has in the past achieved, it should nevertheless lay forward-looking plans for post-war activities.

Out of this conflict will come many changes and changed viewpoints. For one thing, it appears that this is going to be a smaller and more compact world. This fact may have important bearings upon the teaching of the history of architecture and indeed upon the view which we hold with respect to architectural history. Certainly the dissemination of mechanical devices that follows the declaration of peace will have an important bearing upon architectural expression. We shall have new

materials, changed systems of construction, and perhaps altered artistic concepts. Much that has been considered almost current will take on an historical distance which we now scarcely deem possible.

Especially will this be true in America where huge war factories and almost unlimited resources will turn floods of strange new consumer goods upon an eager purchasing public. Post-war America is bound to be a very different sort of America than that which we have hitherto known. Much that has been achieved architecturally is headed for the discard. There will be much demolition, much remodelling, much that is entirely new and strange.

It will therefore be important for us to be active and diligent, as individuals and as a Society, in recording our past and present before it is too late to make a complete record. The H.A.B.S. of the depression period was a splendid example of what might be done in this direction, although it was, of course, only a sampling of what remains yet to be done. Every day, every year, buildings that are important links in the record of American architecture are disappearing. Most of these are inadequately recorded. We must be prepared to record some items that are mediocre, even bad, for these also are a part of that record.

In every state there should be in progress architectural history surveys sponsored by the Society and participated in by members of the Society. In every city of any size similar studies should be under way. It is important that in each area of our country local enterprises looking toward the building of a complete architectural history of the locale be undertaken. The Art Institute in Detroit recently held an exhibition of local historic architecture. Last year the Taft Museum of Cincinnati assembled a somewhat similar collection for the Cincinnati area. Other agencies and individuals have organized similar enterprises, some of them resulting in valuable publications. But so far the surface has only been scratched.

The recent organization of The Thornton Society of Washington, D.C., is a most hopeful sign. A considerable organized group of interested persons may do much toward the preservation of historic monuments in an area and in the encouragement of studies of the sort above mentioned.

In each area, likewise, it is important to assemble data concerning architects, contractors, builders. Important local compilations should include what might be called "historical directories" of the men of such professions. There remain to be written biographies of a considerable number of important American architects.

In certain of our larger centers histories of local architectural societies and their activities would constitute important contributions. I know of one or two cities where such studies are in process. Certainly we should look forward to a time when, upon the basis of such studies as I here outline, it may be possible to write a definitive architectural history of each American city, of each American state and of each other important geographical division or social movement. But before much of this can be achieved, there remain to be done infinite amounts of "spade work," exploration, survey and recording. As I view it, the real contribution which this Society may make to a true knowledge of our American architectural past lies somewhere in this direction. It is my conviction that the Society should, amongst other aims, now lay plans for concerted action looking toward a large scale attack upon this problem at such time as most of us are again about our normal business.

In this connection there should be a central index of the researches and studies in progress, whether being carried on by individuals or by other agencies. From time to time, such lists should be published in the Journal. This would help to avoid duplication of effort and promote collaboration.

Also, as pieces of research or investigation are completed, publication should follow in the Journal. In a word, the Journal should be a general clearing house for all such matters.

It is my very great hope to be able to serve the Society as fully and completely as possible. To this end, I invite communications from any and every member who may have constructive ideas for the betterment or enlargement of our common effort.

Rexford Newcomb.

PREFACE TO THE SPECIAL ISSUE ON THE HISTORY OF CITY PLANNING

Sooner or later, most students of architectural history develop curiosity concerning the setting of the isolated monuments they study. Because a large proportion of building types are associated with life in village, town, or city, the historian soon is led to consider the broader aspects of these types and their interrelation in the whole communal complex in which they are so conspicuous a part. His reward for research in this complimentary field is not only a deeper appreciation of the function and aesthetics of the individual structure, but also a growing recognition that evolving urban forms can in their own right contribute worth-while illustrations of cultural processes and ideals.

To point the argument, A.S.A.H. is pleased to present a special double issue on the History of City Planning. By it, A.S.A.H. hopes to encourage further studies in this field and to provide a gathering place for planners who recognize the value of such researches. The field is younger than that of architecture, but it deserves comprehensive exploration, especially in the Americas. What more cordial audience could it obtain than that our membership affords?

The Editor.

HISTORY AND THE MODERN PLANNER

by Carl Feiss

Since city planners have still to agree on the external limits of their profession the influence of historical sources on their work varies largely according to the special interests of each individual technician. The present extreme latitude in defining the planner's job adds immeasurable to the complications, not only of limiting the work and defining the energies to be expended, but also of the choice of source material. Moreover, the insufficiency of external criticism of planning programs, as related to historical precedents, whether architectural, social, economic, or political, makes judgment difficult and proper appraisal questionable. It is perfectly obvious, however, that, irrespective of the bias which training, abilities, or interests inculcates, the individual technician must constantly relate his program to the historical antecedents of the community which he guides.

The source material for city planning varies significantly in its character. On the architectural side, European planning from Hellenic to modern times has been well documented and analyzed. Sir Raymond Unwin, in the outstanding treatise on planning prior to 1930, *TOWN PLANNING AND PRACTICE*, first published in 1909 and reprinted in 1932, emphasized growth in historical precedent and the logical development of architectural design. The use of historical material in this highly technical and interesting work is perhaps a model for combining historic reference with contemporary suggestion. Dr. Steuben, in his book, *DER STADTEBAU* (Stuttgart, 1907), may have provided a precedent for Unwin by his constant reference in text and picture to historical precedent as a basis for contemporary civic design. His choice of material, however, is less selective, although highly interesting. Both he and Unwin place major emphasis on street design and building grouping, the approach being architectural and engineering rather than social and economic.

Unwin's and Steuben's works differ materially from the purely historical approach of such a scholar as Haverfield who employs, in his *ANCIENT TOWN PLANNING* (1913), an academic approach which, though well handled, suggests no specific application of precedent to modern practice. Both H. Inigo Triggs, in *TOWN PLANNING* (1909), and H.V. Lanchester, in *THE ART OF TOWN PLANNING* (1925) devote nearly half of their books to the history of civic design in Europe, with some reference to the United States. Neither, however, succeeds in integrating this interesting historical material with contemporary design as successfully

Mr. Feiss, prior to his recent appointment as Director of the Denver Planning Commission, was in charge of the Planning and Housing Division of the School of Architecture, Columbia University. His active interest in the history of city planning, especially in the Americas, as manifested by his article, "The Heritage of our Planned Communities" (*Journal ASAH*, v.1, no.3-4, p.27-30, J1-O '41), and his forthcoming publication with Capt. Frederic R. Stevenson, *ASAH*, on early New England town plans, indicates that he practices what he preaches.

as did Unwin. Nor do any of these earlier writers broaden the scope of their inquiry as successfully as Giedion has done in *SPACE, TIME AND ARCHITECTURE* (1941). It is true that Lanchester dealt with the social aspects of planning more successfully than any previous writer on planning, although Charles Mulford Robinson in his two outstanding books, *MODERN CIVIC ART* (1903) and *THE IMPROVEMENT OF TOWNS AND CITIES* (1900) made the attempt, possibly under the influence of the civic reform movements which were sweeping this country at the time he wrote.

Thus, it is practically axiomatic that historic precedent forms the basis of general texts on planning. Bauer's *MODERN HOUSING* and Mumford's *CULTURE OF CITIES* are cases in point. Both use history as the basis for a variety of theses on modern civic design and redesign. It is only when a writer is concerned with specific problems and technical detail that he may develop his thesis on a strictly contemporary basis, confining his background discussion to a decade or two. This is a natural differentiation, for such authors have a right to assume that technical readers have had recourse to and training in historical backgrounds. The *HARVARD CITY PLANNING SERIES* is an example. It is obviously unnecessary to precede each thesis with full historical summary.

The modern planner has done a lot of talking--more talking perhaps than planning--and our shelves are loaded down with the well-bound but unthumbed proceedings of innumerable planning conferences and congresses. The average planner in his daily work seldom, if ever, needs recourse to the innumerable sayings, bickerings, and dissensions of his forebears. His interest in the evolution of planning law, zoning, and codes is usually limited by his own legal interest and ability, as well as by the specific problems within the area in which he works. The average practitioner puts high value on illustrative material, and for such material on historical examples prefers the pictorial summaries in Hegemann and Peet's two large volumes over any number of volumes of the National Conference on Planning.

In a field changing as rapidly as city planning, textbooks become obsolete overnight, but the constantly enlarging material dealing with historical background remains an important basis for the reasoned steps any planner must take.

The Unlimited Horizon

The modern city planner assumes far greater responsibilities than his predecessors. The civic facade, so important to Camillo Sitto, is no longer our primary problem. We need to ascertain the community's biological growth, its place in the socioeconomic development of the region in which it is located, and the relation of that region to the nation and to the world. Were we to restrict ourselves only to the type of book mentioned above, we would be inadequately served, first because we would be attaining our source material second hand, very much boiled down, and second, because we would be accepting conclusions drawn by others, conclusions which might not apply to our own particular problems. What we need is not easy to find in a chaotic world that stubbornly resists logical systematization. Having convinced a planner that he must be aware of the historical precedents of contemporary economy, it is too much to expect that he read all the works of Adam Smith, John Stuart Mill, and Robert Owen. If he finds that the problems of labor and income seriously affect the

decisions which he will be forced to make in industrial planning and housing, must he read all of Marx and Engels? Would he be capable of absorbing without much specialized training the theories of Henry George, Thorsten Veblen, or, for that matter, John Maynard Keynes? The digest still remains to be written that will summarize the highly complex and technical thoughts which form the historical and philosophical basis for the kind of life we are now leading. We do not know what kind of civic design will blossom from a proper combination of study and knowledge of history, social sciences, philosophy, economics, political science, architecture, and city planning. Whether it is really possible to integrate them is also still unknown. Yet we realize that combine them we must, for the planner requires a unique background by necessity of his vocation, for in posing the general against the specific, he becomes an exponent of the former and a practitioner of the latter.

For the planner, the history of these many fields becomes important, not in developing his knowledge of what has been, but in stimulating his imagination to the creation of a community finer than that in which he now lives, built and based on the best ideas that men have expounded and attempted to practice.

Local History

The first step for many a planner is to acquire full cognizance of the reasons for the special character of the particular community in which he is working. He must know why it is located where it is, where the people came from, how industry and commerce grew there, and how the city itself evolved. Quickly he learns that no one historical event is as important as the trend of events, the whole sequence of actions that moulded it to its present form. It is this sequence, this continuity, which forms the basis for all growth, normal or abnormal, and it is the understanding and the graphing of these trends that forms the basis for the logic which will permit him to project his plan into tomorrow.

Then, too, the planner should be sensitive to specific historical trends, for this sensitivity will govern his program, and will, if he is active, influence the growth of the community along the lines of his special abilities. For example, a planner with architectural training and a feeling for historical forms, placed in charge of the planning of a community possessing a fine architectural heritage, can perform along the lines of his specialty a function fully as beneficial to the community as a man who may have perhaps only a legal or an engineering or a sociological approach. Unfortunately, of course, where architectural heritage is lacking, it cannot be created artificially by importation. No one has ever succeeded in transplanting history.

It is probably more than we ought to expect of our contemporaries that they be the supermen which this thesis seems to imply. It is obvious that not many can embody entirely within themselves all the interests and abilities required to guide the well-rounded growth of tomorrow's city. The planner, irrespective of his special and major interests, needs constantly to be reminded by his historical research that he cannot be expert in all of the fields which affect the growth of his town. Nevertheless, it is his duty to familiarize himself with the history of the community in as many of its phases as possible, in order to meet its citizens on a common ground and provide them with as full an understanding as possible of what the planner is talking about.

The greatness of a city, its beauty, its efficiency, and its order, depend not only on the fashion of its buildings, but on the special character of its history. The empty shell of a Canberra is as meaningless in pattern and in structure as its history. Only time and history itself can correct and finish this kind of plan. Fortunately, few of us are required to work in a vacuum; usually we must deal with historical precedent and a sequence of historical events.

Man is a sentimental and romantic animal. He likes the associations of memory and the knowledge of other men and events that help him to establish himself in his personally all-important role in history. The grimy streets of London, echoing a thousand years of very human history, mean more to us than the squares of Nancy, which, despite their architectural perfection, remain unimportant to the world at large. The average American industrial city has all of the drabness of London, but little of its history. Unable to manufacture history out of whole cloth, we must take what we can find and make the most of it in order to develop a community's consciousness of its own importance and of its permanence. We must add, if we can, some of the architectural and human charm of Nancy and other truly great historical designs, and, while striving for perfection in design, endeavor to create a distinction indigenous to the locality in which we work.

The Historical Concept.

The mistakes which our planners have made in accenting the historical approach without any real understanding of the biological evolution inherent in history has bequeathed us disastrous results. Our urban world is pocked with ghastly Roman fora and other hangovers which are, at once, most obvious perversions of history and silly solutions to modern problems. The historian, full of enthusiasm for the qualities of classical design, too often fails to note that these qualities do not necessarily apply to the contemporary scene. That the city planner and civic architect seem unable to grasp this not too difficult idea without assistance from others, may be as much a fault of education as of taste or good sense. The mistaken use of historical precedent has proven time and again as dangerous, if not more so, than a total lack of such background. Growth from the soil and from the people, unadulterated by foreign influence, may, by its very naturalness and simplicity, achieve an urban esthetic more satisfying and mature than sophisticated but artificial patterns. Similarly unprofitable is the use of historical motifs in the social sciences, economics, and law, adopted without modification or assimilation. Time and again an idea successfully applied in a particular culture and economy is found impossible to translate to another. Fortified by his thorough familiarity with the best tradition of his profession, the city planner must be able to judge for himself what benefits are to be derived from history and how best to integrate the historical concept into the vital going concern which is the growing and constantly changing city.

It would perhaps be wisest to advise all city planners to use history with caution, to avoid over-romanticizing or over-classicizing, to accept history only as one of the many motifs which, combined in proper proportion, can develop for a city the finest quality of plan. The planner must combine history with every other element in his program, weighing, balancing, and judging. Whatever his decision, he makes history for the next generation of planners to quarrel over.

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FORM AND FUNCTION IN URBAN COMMUNITIES

by Hans Blumenfeld

The infinite variety of form manifested by cities and towns has always appealed to the imagination of men. To us the contrast between the confused ugliness of most modern cities and the ordered beauty of old ones poses the question of origins. Were these communities designed as a church or a palace is designed, or did they develop as trees or flowers grow?

Some scholars have tried to distinguish two types of cities: "grown" and "planned." But this dogmatic distinction is hardly valid, for all cities are created by men acting purposefully. The choice of site is always an important act of planning, and involves a decision that may be made by either a group or an individual. The same holds true for every other element constituting the city. The question is therefore: Who planned this or that element, what was planned by this or that individual or group; and, most of all, why did they plan it so?

Whoever made the decision was ultimately controlled by the needs which the settlement was intended to satisfy. Its functions determined its form. The difference lies in the degree of consciousness of the city builders. Did they anticipate all their needs and provide for them immediately, or did they have to learn the hard way, being forced gradually to adapt the framework of their community to their way of living?

Between these two extremes, there exists a series of intermediate solutions. At one end we find a swarm of squatters, each building where, when, and how he pleases; at the other, the military camp predetermined to the last doorknob. Neither is a city.

What IS a City?

In primitive human settlements, such as the "long houses" of American Indians or Polynesians, or the "pueblos" of cliff dwellers, there can hardly be a question whether they were "planned" by the group or "just grew" out of a sequence of unrelated individual actions. In primitive clans, the individual is not yet differentiated from the group.

At a later stage, in the early middle ages of Northern Europe, we find two main forms of human settlement: villages, and castles. But neither of these may yet be called a city or town. As in the "long house," the inhabitants of the castle all belonged to one household,

Mr. Blumenfeld, already known to ASAH members through his article, "On a peculiar feature of the city plan of Mohenjo-Daro" (Journal ASAH, v.2, no.1, p.24-26, Jan '42), began his training under Brinckmann, worked on urban planning in Soviet Russia, and is now with the Philadelphia Housing Association. The JOURNAL welcomes this informative and stimulating paper.

although they were divided by rank and occupation. Villagers, on the other hand, like members of a clan, were equals, but they lived in individual, relatively independent households. Plurality of social units thus differentiated the city from the castle.

Often the town's difference from the village has been ascribed to the division of industrial and agricultural labor. But in most ages and lands city dwellers have also been tillers or owners of the soil; and industrial villages have flourished from the remote past down to our day.

It was division of class, not work, that separated the city from the village. The testimony of the past is unmistakable on that point. In the medieval city citizens within the walls enjoyed military, political, or economic power, and legal privileges, especially monopoly of trade and personal liberty.

Likewise, in antiquity, the Greek word, "polis," denoted public authority. In Homer's day, "polis" meant castle, such as is seen in the powerful ruins of Tiryns. The common people lived in scattered villages. Later, one of these villages enjoying a particularly favorable location became the concentration point of the local aristocracy and assumed dominion over the entire surrounding territory. As merchants and craftsmen rose in power and finally overthrew the big landowners, they became the "polis," controlling the countryside and exploiting the fields increasingly by slave labor. Now the entire settlement was enclosed by walls. The former castle became the "Acropolis," its walls either demolished or incorporated in the new enciente of the city. Finally, in the fourth century, when new cities were founded they often lacked either castle or Acropolis. At Priene, for example, the city occupied the slope of a hill. The towering peak above, though enclosed within the city wall, was uninhabited except for an occasional garrison in its fort. The relation is exactly the reverse from that at Tiryns.

In Italy, the development differed somewhat. Here the political unit had never been the village, but always the "pagus," the region inhabited by the tribe. In normal times its members lived scattered over the countryside, but when danger approached they all took refuge with their herds in a walled place, usually located on a mountain top. Remnants of similar camps of refuge (the "fluchtburgen" of the German scholars) are also to be found in other European countries, often dating back to neolithic times. In Italy these "oppida" became the capitals and sanctuaries of their tribes. Their center, the "templum," magically bound to the four cardinal points, was the ideal center of the "pagus," bound to it by the two main streets and the four gates. Here, in the very center of the enclosure, was the "forum," meeting place of the tribe (whereas the Greek "agora" lay outside the gate of the original "polis"). Soon the priests and magistrates became permanent inhabitants of the place. Again the city had evolved as the seat of a privileged class, with common folk scattered over the adjoining countryside.

Apparently the result was the same as in Greece, although the different origin made itself permanently felt. The city had started as the recognized center of a territory. Its sacred walls remained. The patricians were rarely displaced or subdued by the plebs. There was usually no duality of acropolis and lower city, no moving down the slope. Even today many of these towns crown the hills of Italy,

filled with the palaces of provincial landlords who thus looked out over their tenants in the valleys.

This characteristic situation is rarely found north of the Alps. Here the development sprang not from the refuge of the tribe, but from the castle of count or bishop, or from a monastery. Peasants brought their dine to the gate of their lord's court. Here, too, they exchanged some of their products with each other, with craftsmen working for the lord, or with traveling merchants. If the location was convenient, a market developed. Its place is always the same, before the gate (as it had been in Greece; and, still earlier in Palestine, the Bible leaves no doubt that the gate was all in all: market, meeting place, court house, town hall). As the medieval market developed, a special town hall building was erected before the gate. The older German towns, especially in Westphalia, invariably show this sequence: castle, market, town hall.

Because they stemmed from the market, not from the camp of refuge, these north European towns usually developed not on hill tops, but in valleys. The market might stretch out along a street leading to the gate, or on a road perpendicular to it. Whatever its shape, roads from the surrounding countryside tended to converge on it.

As soon as merchants and craftsmen felt strong enough, they turned against the lord of the "burg." If successful, they became the "burghers," and at once started to build wall and moat. However, they did not succeed in suppressing the barons as completely as their Greek predecessors had done. At best, they drove the nobles from the immediate neighborhood, but the lords still continued to rule the countryside from their rural castles. The burghers now formed a secondary class, well above the common peasant folk, and used their newly won power principally to monopolize trade within their walls. Merchants' and craftsmen's guilds grew. While the larger houses of the merchants clustered around the market, each craft guild settled in its own street. Organization of space reflected organization of function.

With increasing prosperity the market could accommodate only a portion of the trade. Peasants were forced to park their beasts and carts before the city gates, and new markets for horses, cattle, or wood developed outside the walls. Once more roads converged toward these points, once more merchants and tradesmen settled along these roads, once more the "outs" rebelled against the "ins" until a new wall took them in also, making new "burghers" out of inhabitants of the old "faux-bourg." The familiar "radial-concentric" plan of many old European cities show the result of these developments.

Planning from Inside Out and from Outside In.

While suburbs might be included within city walls, while neighboring towns might merge into a single community, the founding of new cities remained the privilege of the secular and ecclesiastic lords. They made ample use of it. Between the twelfth and fourteenth centuries, hundreds of towns were founded throughout western and central Europe, especially in Southern France, Northern Germany, Bohemia, and Poland.

We would expect the plan of these new towns to follow the radial-concentric scheme which was beginning to evolve in their predecessors,

but there is not a single example of such a plan. The majority of these creations show what we would call a "gridiron" scheme.

We are used to regard city plans mainly as street plans, and think only of traffic needs wherever we see a street following a straight line. But the "locatores" of the medieval towns were concerned, not with traffic, but with parceling out land to settlers. They allotted town plots according to the same method that they used to allot parcels of land to tillers of fields.

In northern Europe, village lands were divided into fields, each cultivated according to the ^{three} year crop rotation system. Each field was divided into long narrow hides of equal width, one for each ploughman. Cities in these lands show the same sort of subdivision, with long narrow lots running from street to town wall, or to the next street. Only later were these strips cut in half and houses built on both ends.

In Latin countries with their vineyards and olive groves, and with a different technique of plowing--plowing crosswise, both ways--land was divided into squares of equal size. The same unit is to be found in Roman cities: a square block, normally divided into four square lots.

The universal influence of agriculture on city planning was reflected by the important role played by the plow in the founding rites of cities. These rites show curious similarities at points as far apart as ancient Etruria, medieval Bohemia, India, Siam, and the Sudan.

In the great valleys of the Indus, Nile, Tigris, and Hoang-Ho, civilization had grown as marshy plains were drained by systems of ditches and dykes. The newly won land was allotted to tillers of the soil. "Sesostris," says Herodotus, "divided the land,... giving to every man an equal square of ground." As far back as 3,000 B.C., geo-metry, the art of land measuring, determined the layout of huge cities built in these plains. Five thousand years later, compare the division of all land west of the Ohio into square mile units which controlled the layout of so many nineteenth century American cities.

In all these cases, allotment of a piece of ground to the individual user was the guiding principle; and wherever this consideration determines the plan, the rectangular pattern prevails. The lots add up to blocks, the blocks add up to a city. It is growth from the inside out, by addition, with a definite interior pattern, but with indefinite outer limits.

As such, it is the direct opposite of the radial-concentric plan which starts from the enclosure. Within it, the main radial streets divide the enclosed territory into major blocks which are in turn more or less arbitrarily subdivided by lesser ways into minor blocks and individual lots. Hence growth is determined from the outside in, by division, with a definite outer limit, and an irregular interior pattern.

These two contradictory tendencies may be traced in every city plan, combined in various ways. The first represents the element which the city has in common with the village: that of being the sum of many social units. The second stems from the element which the city shares with the castle: that of being a single corporate unit, a center of power which controls the surrounding territory; politically by the

strength of its walls, and economically by the tentacles of roads leading to its market.

Only where both these elements are present, may we talk of cities or towns. A group of houses is not a city; nor, at the other extreme, is any settlement subject only to a single will, such as a palace, an estate, or a monastery. Coordination of many social units within one larger unit is the specific task of city planning. The inherent contradiction is ever present. Today we talk of the "superblock" and of the "neighborhood" as units of planning. The superblock is determined from the outside in, by the surrounding major traffic arteries which serve the entire city; the "neighborhood" is determined from the inside out, by the community activities of the inhabitants. The two are not necessarily identical or co-extensive.

Vicissitudes of the Rectangular Pattern.

Only in the irrigated plains where land was subdivided into square acres have cities from the earliest days been laid out on rectangular plans. In hilly Greece where boundaries of fields and vineyards followed the irregular pattern traced by nature, the arrangement of early towns showed no rational pattern. Streets and alleys were simply the residue left between houses and courts. When rectangular patterns came to be adopted for new cities, due probably to experience in colonizing, dimensions of the blocks were carefully determined as multiples of a basic "module," but street widths were not controlled by any definite rule. The secondary character of the streets is clearly visible from the way the "agora," the public place, was arranged. It was always treated as a separate construction, a court surrounded by a U-shaped colonnade, built on one side of a street. The building on the other side of the street was not treated as part of the enclosure of the market place. The "stoa" at Priene, for instance, extends farther along the street than does the colonnade facing it.

It was different in Italy. There, two main streets, meeting at the forum, were the primary elements. They were always broad and straight, even though the blocks were often somewhat irregular. As the Roman Empire came to dominate the peoples of the world, these main streets came to represent its power. They were dominated by some monumental building as a "point de vue," and the center of the forum was strongly emphasized. Wherever men have desired to symbolize authority, whether in monarchic Versailles or in republican Washington, they have adopted this Roman principle of axiality.

Sometimes Roman city builders further emphasized monumental perspectives by lining both sides of the street with colonnades. This application of a uniform design to the walls of a street or a place, regardless of the variety in building plans behind these facades, reflects faithfully the division between public and private spheres of life, in ancient Palmyra as in Napoleonic Paris.

The Greeks knew nothing of this, for they had no conception of the state or law as abstract powers differing from citizens and their decisions. Their buildings on the agora, as in the sacred precinct of the gods, were never related to any axis, but to man, especially to the person entering the precinct through the propylon, the entrance gate. With them, the rectangular pattern had an entirely different origin and purpose; yet the resulting straight streets lent themselves well to the Roman purpose of axial organization.

The medieval towns cared nothing for such abstract formality, but they adopted the rectangular pattern because it facilitated subdivision. Never were streets emphasized by monumental "points de vue;" nor were places arranged symmetrically to streets. Where a market place was needed, one or more blocks were left open. If their streets were sometimes fairly straight and wide, it was hardly because of traffic needs, but because they served an important function as firebreaks. In later periods, for instance, in the replanning of Russian cities during the eighteenth century, it was mainly for this reason that they generally adopted a checkerboard pattern of very broad streets.

The right-angled net of streets, so convenient for the surveyor, was found to be equally opportune for the builder. Bricks or paving blocks, boards or tiles, crossings of rails, or connections for an ever increasing number of pipes--everything was made to fit this most universal of standards. Finally, when traffic increased in speed and volume, straight streets were found eminently fit for rapid movement, and rectangular crossings the most practical for traffic regulation by red and green lights. Thus, the checkerboard pattern, originally developed for a now obsolete function--the division of acres for plowing--was again and again successfully adapted to new purposes.

Vicissitudes of the Concentric Plan.

This persistence of form despite changing functions is even more noticeable with the opposite type, the town plan determined by the circular form of the enclosure.

This type of plan can claim an ancestry no less venerable. If the rectangular division of land goes back to the ploughman, the first round enclosure was the herdsman's pen. Today, in the Hottentot Kraal, huts are built along the inside of the circular fence, with an open space for the hords in the center. The Scythians, in their camps, parked their wagons in the same way. Villages of the Western Slavs were similarly arranged, with huts in a wide circle around the central commons and pond.

The circle, shortest line of enclosure, was as appropriate to keep the enemy out as it was to keep cattle in. Walls of castles of refuge and later of cities were skillfully adapted to use natural defenses, and consequently their route usually only roughly approximated a circle. But wherever the city is viewed primarily as a fortress, the circle is regarded as the ideal form. This is evidenced not only by written and painted testimony, but also by occasional realizations of the perfect circular wall, as in the ancient Hittite capital of Sendjirli, or in medieval towns, like Bergues in French Flanders, and Madrigal in Spain.

Whether the outline is mathematically exact or not, the circular pattern becomes more blurred as we approach the center. This is a visible expression of the fact that the plan originated with the enclosure and developed from the outside in.

It has been said that walls influence the city plan more profoundly after they have been torn down than when standing. Frequently fortifications have been transformed into promenades surrounding the city or into a green belt. Because markets had developed before several of the gates, it was felt necessary to connect these centers

of trade with each other by circular streets. When railways appeared, their terminals were located at the edge of the densely built-up core of the old cities. The circular road following the old enclosure of this core gained added importance as a connecting link between these railroad terminals. Sometimes even a circular railroad was built along the line of the former enclosure. Hardly ever have these enclosures been entirely obliterated.

Such is the tenacity of these simple geometrical forms, the circle, the straight line, and the right angle. They survive because of their adaptability. Forms more specifically adapted to their functions perish as soon as those functions become obsolete. The carefully calculated polygons of Vauban's fortifications have had to be destroyed at great cost, leaving no trace, while the primitive circles drawn by the medieval builder still have their use as voids, just as once they were used as solids. "Transposed" crossings, cleverly invented by city planners less than a generation ago were made obsolete by the introduction of traffic lights; but these same traffic lights fitted perfectly into the old-fashioned rectangular street crossing. What will happen to our beautiful cloverleaves once our present system of motor traffic will have had its day?

Planners are always late.

Faced with an ever changing world, the planner's task is not an easy one. How did the planners of old acquit themselves?

We have mentioned the fact that medieval city planners thought primarily of allotting parcels to settlers, a consideration that usually resulted in a pattern of roughly rectangular blocks. Their concept of the town as an agglomeration of residences for farmers and merchants, protected by a wall, reflected the social structure of the early middle ages when traveling craftsmen worked in the houses of their clients. In China where guilds have always remained weak, this is still largely the case; and it is hardly an accident that Chinese cities show a similar pattern, though often on a much larger scale. But even in medieval cities, planned in the thirteenth and fourteenth centuries at a time when the guilds had become powerful and crafts could only be practised in the shops of their members, there is nothing to indicate that streets were differentiated according to trade or profession, nor that streets were designed to serve the traffic moving to and from the market.

Only in the Renaissance period, did city planners develop a new concept. The city was to be surrounded by a polygonal wall, with radial streets converging towards the central market with a tower or castle in the middle. The radial streets were connected by secondary streets forming a series of rings concentric with the wall. The central market was to be reserved for the most valuable commodities, and secondary market places, distributed symmetrically halfway between the center and the periphery, were assigned other commodities. A separate street was to be allotted each trade. All of these traits were to be found in existing medieval cities, but the new scheme rationalized the type that had developed spontaneously. After 300 years theory had caught up with practice.

The concept of the city as a complex entity now controlled every detail of the plan. Symmetrical places and streets were carefully designed, sometimes even at the expense of a reasonable shape of the building lots. Few cities were actually built following in toto this

elaborate scheme, but many of its elements were embodied in cities built during the following centuries. Especially did the central place with streets radiating from the castle become a favorite motif in many European capitals. Lord Baltimore's cavaliers transplanted it to our shores in their beautiful capital, Annapolis.

At the time when Renaissance architects were designing their "ideal" cities, the economic basis of the medieval city was already beginning to crumble. Craftsmen's guilds no longer monopolized the local market. Division of labor between cities was developing. Rich merchants, favored by princes, set peasants to work on industrial products. Factories and mills sprang up in the countryside. Alongside the merchants a new upper class of civil and military officers and professional men appeared. As guilds decayed and free trade came into being, weaver's row and tinsmith's alley became mere names. Both the number and the size of trade establishments were constantly shifting. The importance of the market place decreased as permanent commercial shops handled an increasing share of business. The city wall, now of little avail against heavy artillery, was still a serious obstacle to expansion.

The old pattern with its elaborate, carefully balanced specialization had become obsolete. What was needed now was a city of a more uniform character. To most inhabitants--the merchants, the civil and military officers, the professional people--the house was now mainly a residence. Industrial activity was carried on largely outside of the city at the sources of water power. The needs of the remainder were so undifferentiated that all they asked for was the right to buy, sell, divide, and combine lots as the need might arise.

City planning ideas at the end of the 18th century reflected these simplified needs. As in the primitive agricultural town, the city was once more mainly an undifferentiated agglomeration of residences and was once more planned as an assemblage of rectangular blocks. Since no function was localized, there was no center, and no streets leading towards a center. All streets were about equally important, and therefore were made equally wide. Sometimes diagonals were introduced, but as there was no particular spot to which they should lead, they were distributed according to an arbitrary geometrical pattern.

Schematic as this plan seems to be, it was quite well suited to city life as it existed at the time, lacking as it did any clear differentiation of function. But even while these plans were being translated into brick and stone, a new differentiation arose, more fundamental than anything previously known. For the first time in history, separation of residence and work place became general. More people now were drawn into the business center than had ever been attracted by the market. Huge industrial enterprises could no longer be fitted into the small blocks; railroads cut through the established street pattern; smoke and noise drove inhabitants towards the outskirts. Enormous agglomerations clustered around the centers of water-borne and railroad traffic and around the sources of raw materials and energy.

Throughout the industrial revolution city planners had continued to extend their gridiron schemes, but at last a new pattern evolved in response to the new needs. As the residential city of the 18th century had resembled the primitive agricultural town with its rectangular pattern, so the localization of functions in the modern metropolis seems to reproduce on a gigantic scale the radial-concentric organism

of the medieval city. Rapid transit lines radiate from the central business district, just as streets had radiated from the central market. Freight terminals for bulky goods have taken the place of the markets formerly at the gates. Industries have been placed in separate zones, just as medieval craftsmen were allotted special quarters. The city wall has disappeared, but the modern city's services stop at the invisible city line, just as formerly protection had stopped at the wall.

Now, however, people live far removed from their work. White collar workers employed in the business center live in suburbs made easily accessible by rapid transit. Some, enjoying reasonably permanent employment, settle around factories on the outskirts, in satellite towns, but the bulk of the workers' families prefer to be closer to the center in a location which allows them maximum mobility in seeking jobs both at the center and the periphery.

With better understanding of the basic structure of the big city, we have invented new techniques to control it: land-use planning, use, height, and density zoning, protective green belts, green wedges and parkways, superhighways, integrated systems of transportation, satellite towns, neighborhood planning, et cetera. While we are here and there beginning to use these tools to transform metropolises into livable places, their economic bases are shifting once again. With energy coming to be widely distributed by high-tension networks, sources of energy cease to be centers of attraction. As chemistry discovers use for everything and makes "waste" an obsolete concept, nearness to sources of raw material loses its compulsion. With intricate nets of railroads and highways, transportation acts to decentralize as well as centralize.

As the majority of the population no longer lives on the land, cities begin to lose their age-old distinctive character as seats of the privileged. Industrial villages have grown into communities containing more inhabitants than many of the most famous ancient cities ever had. The old difference between town and countryside is beginning to disappear, and a new unit of human settlement is emerging: the industrial region.

But again the spiral is turning. Within the region as a whole, functions are not yet localized. In many places throughout this super-unit, industrial, business, residential, and even agricultural sections may appear. But the individual units, as well as the entire region, are on a vastly larger scale than anything previously known.

Yesterday and Tomorrow.

In retrospect, city planning does not seem to have been very successful. Almost invariably the planners thought of one or two functions, forgetting others which soon became important. The rectangular plan was useful in many ways; but its basic concept of the city as an addition of individual units impaired any functional differentiation and hindered the development of definite centers.

The circular plan proved even more adaptable to various uses, but its basic concept of the city as a definite unit stood in the way of gradual growth. These cities could only grow by leaps and bounds. Until they had gathered enough strength for the leap, they almost suffocated in their enclosures. Nor has removal of the walls entirely overcome this hindrance. The broad boulevards, the parks, or the rail-

roads which have taken their place, still act as barriers. While on Manhattan's gridiron the shopping center shifts gradually northward on Fifth Avenue, in Vienna, shops hesitate to move outside the "Ring."

Yet there were and are many old cities which are clear and beautifully articulated organisms, perfectly adapted to their functions and to their natural settings; but, with few exceptions, these are cities where the original plan has been all but obliterated by gradual change. We have objected to the concept of the "grown" city, but it must be admitted that the process has much in common with organic growth. It follows the line of least resistance; natural selection is at work. If a street is not used, neighbors encroach on it. Farmers driving to market avoid steep slopes, and the wheels of their wagons trace a street following the contours. There are community decisions also. A street is widened, or a new one is broken through to connect two important points; a public building is erected in a conspicuous place; swamps are transformed into lakes or parks. There may even be undertakings of great scope, such as a system of superhighways or a central railroad station replacing a confused muddle of terminals and tracks. But all these decisions are made to answer problems as they come up; they are not necessarily part of any preconceived, comprehensive plan.

If the results of gradual adaptation have in the past been so much better than the results of most preconceived plans, should we not follow this method exclusively?

The old cities we admire today took a long time to reach their present perfection. Social changes were slow, and physical decay was rapid. Most buildings were constructed of wood or clay, and most streets were only dirt roads. The process of weeding out the unfit had time to run its course. "Organic" growth was possible. Today social changes are rapid, and our buildings and streets are made of solid brick, steel, and concrete. They remain intact long after they have outlived their usefulness.

Nevertheless, we can no longer wait for nature to take her course. We must take her course. We must learn to plan a city in the way it would have grown if it had not been planned--if it could have had the time to grow. This is not the prevailing concept of city planning. Most city planners of the past have approached the design of a city in the same way architects design an individual building or a garden. But the difference between an individual building and a city is not merely quantitative. The individual building provides for one social unit, even though it may be a large corporation. In contrast, the city consists of a multitude of social units with ever changing relations.

It is the task of the city planner to anticipate the needs of all these units and to coordinate the means of satisfying them. This he can do only if he is able to grasp not merely the changing intentions of men, but also the basic trends which determine those changes. He must be able to understand the ever changing relations of social forces and of the physical environment in which these forces operate. Essentially this is an historical approach. Although the city planner does not have to be a historian, he should be historically minded, for it is doubtful whether he can acquire this fundamental understanding without a knowledge of history, especially the history of his own field, the history of cities.

The city builder of old, in creating the framework for the life of his contemporaries, visualized his city as a three-dimensional organization of space and mass. When he designed places and streets, he saw clearly the simple spatial relations of the paved surfaces and the walls of the surrounding buildings. When he traced the city walls following the contours, he visualized the towers and gates crowning the hill. There was no hiatus between the technical and the artistic side of his work. Because his creation was clear and logical, it appeared clear and logical. Because it sprang from human imagination, it can to this day be perceived and enjoyed by human imagination.

Increasing division of labor has destroyed this natural unity of function and form. Street plans are drawn without any conception of the buildings which are going to line them. Every element of the city is treated separately, without visualizing its environment.

Today we must regain, by conscious effort, the essential unity of function and form. It is not a question of inventing a "city beautiful." It is a question of discovering the forms which will most clearly give expression to the functions of our cities, as the form of the old towns reflected their way of living. The social life of men is the specific side of nature which the city builder's art reflects. His task is the same as any artist's; as Albrecht Durer put it: "For, verily, art is inherent in nature; he who can extract it therefrom will hold it."

N E X T S T E P S

Editorial plans for the next JOURNAL feature three excellent articles. The first is by Dr. Emil Kaufmann who presents a careful biographical and interpretive study of the French architect, "Claude-Nicholas Ledoux, the inaugurator of a new architectural system." In the second article, Roger Hale Newton deals with "The Traditional Polychromy of the American House," an aspect of our architectural landscape too often nullified by well-meaning but ill-informed devotees of white-clapboard-green-shutters school. We predict the rainbow will seem pallid after this expose of what our grandfathers thought genteel. Third, our new vice president, John Coolidge, turns in an excellent performance on "Preliminary Steps to the New Architectural History."

Members should be reminded that the Editor welcomes articles of interest to our readers. While he cannot undertake responsibility for them, he will use all possible precautions for their safety. Correspondence relative to the suitability of proposed articles is invited. Provision for a limited number of illustrations is possible. News items in the field of architectural history, preservation, exhibits, and member activity are especially desired.

THE IMPACT OF ANCIENT CITY PLANNING
ON EUROPEAN ARCHITECTURE

by Karl Lehmann-Hartleben

By a not insignificant coincidence, the inauguration of the New York Chapter of the American Society of Architectural Historians is taking place on the day following the two hundredth anniversary of Thomas Jefferson's birthday. Having been asked to speak before this distinguished gathering on the impact of ancient city planning on later European architecture, I may well begin with this brief discussion of a vast subject with a quotation from Jefferson. In a letter addressed to Major L'Enfant and dated April 10, 1791, he says: "I have examined my papers and found the plans of Frankfort on the Mayne, Carlsruhe, Amsterdam, Strassburg, Paris, Orleans, Bordeaux, Lyons, Montpellier, Marseille, Turin and Milan which I send in a roll by post. They are on large and accurate scales, having been purchased by me while in those respective cities myself. As they are connected with the notes I made in my travels and often necessary to explain them to myself, I will beg your care of them, and to return them when no longer useful to you." All but three of the twelve European town plans which Jefferson contributed as study material to the planning of the new capital of the United States were originally antique cities, or at least ancient settlements, one of them Greek, the other eight Roman. This episode reveals how, in city planning, an unbroken tradition from antiquity consciously and unconsciously conditioned the concepts of the later world.

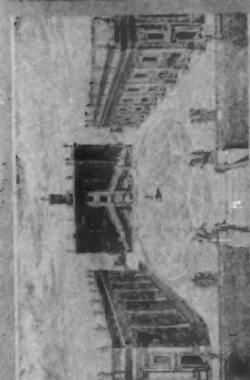
It is this very comprehensive living tradition which time and again creates startling analogies of design. It is difficult, however, to distinguish in individual cases actual survival from conscious revival, or both of them from creative crystallizations resulting from similar and continuing approaches to design. Let us consider this general situation as it is reflected in two outstanding examples of European design.

In 18th century Bath, the columned streets with their solemn antique and academic elements, as well as the use of such terms as Forum, Circus, Gymnasium by their designing architects, are unquestionable documents of a conscious classicistic revival in this ancient Roman spa. One might be tempted thus to interpret the appearance of the west end of Bath Street (Fig. 1) as an imitation of a classical design. Indeed, the columned street branching out into a curved square, occupied by an architectural monument, occurred long ago in the late Roman plan of far distant Gerasa in Transjordan (Fig. 2). It was,

Dr. Lehmann-Hartleben, director of the Archaeological Research Fund, of New York University, is well known for his excavations at Samothrace, his studies of Pompeian architecture, and his work on ancient Mediterranean harbors. Dr. Lehmann-Hartleben's present paper was read before the inaugural meeting of the New York Chapter, ASAH, held at the Institute of Fine Arts, New York University, April 13, 1943.



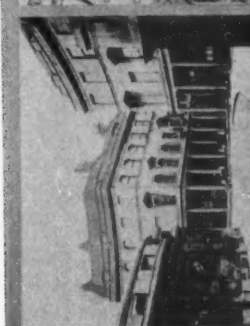
4. ROME: FORUM ROMANUM RESTORED



3. ROME: CAPITOLINE: CIVIC PIAZZA



2. GERMAN SQUARE: SOUTH TERNION



1. RATIO: WEST END OF: LANK STREET

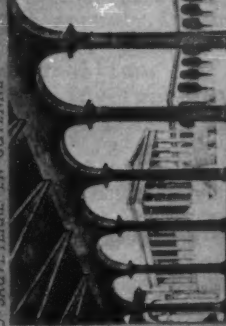
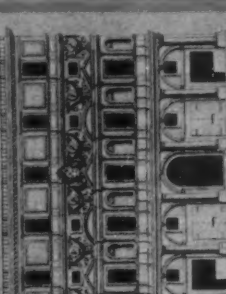


9. CREMONA: MARKET PLACE

7. VILLENEUVE-LES-AVIGNON: PORTICO STREET

6. OSTIA: PORTICO STREET

5. SAUVETERRE EN GUYENNE

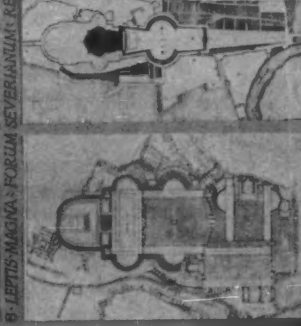
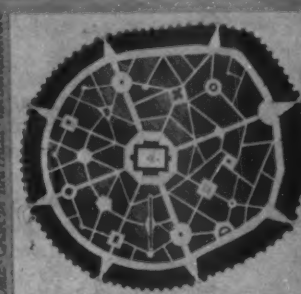


12. ROME: CASA DI RAFFAELI: VIA DEI FORI

11. ROME: VIA TIBURTINA

10. ROME: FRESCHI: HARBOUR TOWN

8. LEPTIS MAGNA: FORUM SEVERIANUM: RESTORED



17. PALMANOVA: PLAN

16. ROME: ST. PETERS: PROJECT OF: CATINATI

15. ROME: RUINS OF FORA OF AUGUSTUS & TRAIAN

14. ST. PETERS: CATHEDRAL: WEST

however, an unusual scheme in antiquity, and the eighteenth century architect certainly did not know this unique eastern example. Rather we have here an unconscious analogy resulting from a general parallelism of approach.

We find another strange analogy two and a half centuries earlier in the formation of the Capitoline Square in Rome, designed by Michelangelo (Fig.3). This impressive, dynamic group of buildings has often been characterized as a new and original contribution, an architecture of masses, marking the transition from the self-contained Renaissance square to the dynamism of Baroque architecture. This design composed a group of three buildings, dominated by the remodeled Palace of the Senators, originally the old State Archives of the Romans. Throughout the early middle ages it had retained its identity in the very name "cancelleria," which had replaced the old Latin name, "tabularium." In its new form, this building was provided with a high podium and a classical facade of the Corinthian order. Thus, it rose above the two lateral units which, with their elongated porticoes, framed both sides of the square. If we turn to a reconstruction of the old Forum Romanum (Fig.4) in which the two long basilicas, the Julia and the Aemilia, framed the open area, and in whose background the Corinthian (not Ionic) temple of Caesar on its wide podium towered over them, we cannot fail to recognize in this group just beyond the Capitoline the same basic idea as it had been expressed 1500 years earlier by the architects of the early Roman empire. Even the half-round niche in the podium of the Palazzo dei Senatori corresponds to the unique semicircular recess in the podium of the temple of Caesar. Note also that in front of this recess there was a base for an equestrian statue (which does not appear in the restoration) corresponding to that of Marcus Aurelius which Michelangelo erected as an ideal center in front of the Palace of the Senators. Given all these relationships and the fact that the new Capitol was actually meant to be the successor in function of the Roman Forum, the analogies are striking enough to make us believe that Michelangelo's design of what was then a new type of public square was inspired by the group-architecture of the old Roman Forum. I believe this to be the case despite the fact that it was just these buildings, the two basilicas and the temple of Caesar, that were among the most destroyed of the Forum. They do not appear among the ruins visible in the sixteenth century vedute of that site. But documents show that in the very decades when the planning and execution of the Capitoline square was under way, extensive excavations were made in all three of them, and that their building material was exploited for the construction then being carried on at St. Peter's.

However this may be, quite apart from revivals of antique ideas of planning--whether produced spontaneously in the antique sense, or consciously adapted from antique models--it is necessary to account for the strength of this unbroken tradition. In individual cases these forces blend and merge, but in the following brief remarks I shall discuss them separately.

First, let us consider the impact of continuous tradition. Here we can practically rule out any direct influences from Greek city planning, for the simple reason that, in the Greek east where city planning had developed in the fifth and fourth centuries before Christ and had expanded tremendously during the Hellenistic age, Rome practically effaced Greek work by four centuries of transformations. Both Greek and Roman city planning had developed the checkerboard scheme. But the essential difference between them was that the Roman plan was dominated

by a skeleton of main streets crossing each other at the exact center. As von Gerkan first showed and illustrated by the Roman transformation of the earlier Greek town, Perge in Anatolia, it was this central scheme which gradually more or less transformed the old Greek towns. By this centralized Roman scheme, the city became a tight, definite organism, complete and comprehensive. The forum was situated at the intersection of the two main streets as the heart of that organism. The emphasis was on streets which became the arteries and veins of this organism. Rome, not Greece, contributed to their monumentalization by colonnades or arcades, and the use of arches and monuments to frame their ends and intersections. These motifs thus became essential elements of urbanism. Well known is the fact that many European towns still preserve their Roman plans more or less modified. Naturally, the situation differs in various regions and in individual cases. In Great Britain, any such continuity was rudely interrupted. London, the greatest center of Roman life in this region, today hardly preserves a trace of its original regular Roman plan. In France, many of the ancient towns shrank to a partial survival behind hastily erected fortifications which, however, aided in preserving the nucleus of the old town. In western Germany, two examples may illustrate the extremes of destruction and preservation. In Trier, capital of the late Roman empire, a complete disruption took place some time after the fifth century, and this is reflected by the lack of continuity between the well explored Roman plan and that of the medieval period. In Cologne, on the other hand, the ancient town plan survived throughout the ages nearly intact in all its main lines. Likewise in Italy, the network of streets in many cities like Naples, Turin, and Milan, has preserved the old pattern to a greater or lesser degree. For example, Florence with its regular center, the Mercato Vecchio, at the intersection of two main arteries, clearly preserves its Roman city plan. Years ago I traveled extensively in Northern Italy from Venice to Genoa and studied the layout of each of the originally Roman towns, checking the relationship of modern plan to whatever is known of ancient streets and ruins. In almost all of them it was amazing to see how stubbornly the ancient plans survived. Lombardy is the classical country of medieval urban development.

A number of the artificially created medieval towns were laid out following the schemes of ancient Roman cities. They should be clearly distinguished from the simple use of the checkerboard plan which may occur in any artificially created town. For example, one may cite the bastide, Sauveterre de Guyonne (Fig.5.), which shows not only the street skeleton of a Roman town plan with a forum at the intersection, but also illustrates the shift in the position of the north and south gates typical of many Roman towns. Almost certainly this feature is not a conscious revival, but rather a transfer from Roman plans still visible in still existing towns nearby.

We must realize that such a survival of town plans as these is possible only by a gradual and uninterrupted process of transformation during which the classical elevations of these towns were slowly supplanted, over many centuries, by new types of structures. During the dark ages, and even in the early medieval period, such towns as Cologne, Bordeaux, and Florence must have preserved much of the plastic appearance and many of the monumental forms which had accompanied the original plan. Indeed, the actual survival of these ancient town plans far into the medieval period implies the visual preservation of a good deal of the architectural elevations originally connected with these plans. General standards and individual features

of ancient urbanism were thus preserved for many centuries. Let me mention briefly a few phenomena which illustrate this continuity.

Foremost among them are the portico-streets, a direct inheritance from Roman times. Their long uninterrupted lines, framing the main streets of every major Roman town from Syria to Spain and from North Africa to Great Britain, left a deep impression in later towns. In numerous cases, as in Palmyra, these streets had had continuous porticoes; in others, like Gerasa, individual units formed the facades of monumental buildings and houses. In Italy these streets used not only columns and architraves, interrupted here and there at a crossing by arches, but also pier-arcades, as seen in the ruins of Ostia* and in the late antique marble city plan of ancient Rome. The elevation of these ancient arcaded streets differed little from those built in medieval, but originally Roman, towns, such as Bologna, or in wholly new medieval towns, like Villeneuve-les-Avignon (Fig.7).

A second element is the extension of these arcades around the market place, a common antique practice of Greek origin, included in the normal Roman city plan. We have instances in the late Roman period where the earlier horizontal entablature of these forum-porticoes was supplanted by arcades, as, for example, in the Severan forum of Leptis, in Tripolitania (Fig.8). It is this scheme which survives in a number of medieval market places, for instance, in Montauban where it is particularly impressively preserved, even though a baroque renewal of the original structures. The Forum of Leptis also serves to illustrate the common antique scheme of a dominating facade of a religious building placed on one side of the forum. This scheme survives in such medieval market places as that of Cremona (Fig.9). In this instance, the broad extension of the colonnaded facade of the dominating building was influenced by Roman fora with their basilicas. It is this type of oppressive monumentalization of a great building on a public square that occurred in Trajan's Forum in Rome and in many other instances.

The plan of Trajan's Forum (Fig.13) also illustrates the decoration of a square by a central monument, sculpture or fountain, a feature developed during the Roman imperial age. Here it was the equestrian statue of the emperor, which for many centuries afterwards remained in situ. Such a central monument was uncommon in medieval times, and where it did occur, almost exclusively in Italy, it is to be considered as a Roman survival. An instance of this is the Piazza d'Erbe in Verona, in which only the central one of its three monuments belongs to the original medieval plan. An amusing instance of such a monumental survival is offered by the two columns erected in 1180 in the Piazzetta San Marco in Venice. Judging by a Pompeian fresco of an ancient harbor town (Fig.10), they repeat a type which must have been quite common in ancient Italian towns, and which still survives, for example, in Brindisi.

In addition to these monumental survivals of antique urbanism--and others might be added--we should consider the direct tradition which influenced the appearance of simpler houses along the street. The great functional city architecture of the Roman empire had developed an entirely new type of metropolitan street, which we know particularly well from Ostia and Rome: an impressive example is the recently excavated Via Bibratica near Trajan's Forum (Fig.11). In Rome many of these high, solid, massive structures with their arcaded shops, inset mezzanine windows, and windowed upper stories stood well preserved throughout the middle ages and continued to influence facades of Roman business streets. Only in the light of this continuity, can we under-

*(Fig.6)

stand the new monumentalization, during the Renaissance, of this type of street facade with shops, such as the Casa di Raffaele (Fig.12).

On the basis of what we have seen, it seems even more difficult to distinguish clearly between survival and renaissance of ancient city planning. On the whole, it may be somewhat surprising that as far as large scale city planning is concerned, the Renaissance architects of Italy, as well as of France, seemed to depend less on direct antique inspiration than did the Middle Ages. This bewildering fact was a result of their theoretical attitude to which the relatively mild and simple concentration, regularity and ornamentalization of ancient city planning did not appeal. I shall return to this point briefly at the end. The same was true of baroque city planners. We have, of course, interesting cases of the revitalizing of ancient streets, as in Sixtine Rome, and of the extending of ancient city plans in logical patterns, as in baroque Turin where the ancient Roman town with its regular plan and even a remnant of its forum had survived continuously, and where baroque architects carried out a new network of streets and squares beyond the limits of the Roman walls. On the whole it seems that the impact of ancient city planning on the revivals of Renaissance, Baroque and modern architecture was limited to the monumentalization of single units in which the revival of such elements as the Roman triumphal arch plays an important role. In the architectural treatises of these periods we find little to indicate a real attempt to study and revive ancient town planning. It was the grandeur of Roman fora that men like Scamozzi admired.

In many cases the monumental features of antique revivals were basically those which had survived in the middle ages and which now were restored, really or allegedly, to their more correct antique appearance. Such arcaded squares as the Forum of Livorno--with a dominating temple at one end--and the Place des Vosges in Paris may suffice to remind us of the revival of this type. More interesting, and supposedly a new contribution of baroque architecture, is the curved square with a monumental frame. Bernini's Piazza di San Pietro, the prototype of such baroque squares, was censured by contemporary architects for its combination of a square with two half-circles. But this very form, with the great facade of the basilica in the background, corresponds too closely to the layout of Trajan's Forum (Fig.13) to be mere coincidence. In a later elaboration of this scheme projected in 1694 by Carlo Fontana (Fig.14), which added two more apses to the precinct at the sides of the Basilica--corresponding to those of Trajan's Forum--and a fifth hemicycle behind the temple, that connection is carried to its logical conclusion. The scheme occurs again in the Place Royale in Nancy where, as in the various projects of St. Peter's and in Trajan's Forum, the apsidal frames curve out from an elongated square. This connection with the model of Trajan's Forum may seem hazardous. However, during the seventeenth century, and even before, architects had made numerous investigations in the area of the forum. Furthermore, one of these great lateral curved extensions had always stood upright and accessible, as it appears on the left in our illustration (Fig.15), while the curve of the other apse still survived early in the nineteenth century in a line of houses at the other end. Indeed, the original project for the Piazza San Pietro by Carlo Rainaldi (Fig.16) shows a clear formal analogy in elevation to what was then preserved of the frame of Trajan's Forum.

In the relationship of Michelangelo's Capitol to the nearby Roman Forum, we saw a direct dependence on ancient monuments in its revival

of the square with flanking monumental portico buildings and a dominating unit in the background. The gradual development of the Piazza of Sta. Annunziata in Florence shows the same basic idea in the final result achieved about 1600: the Ospedale of 1419, the corresponding arcaded structure on the other side of 1517, and the new dominating facade of the church begun in 1601 show a progress in that direction which, while it may or may not have been inspired by ancient ideas, ends as a revivalist monumental square. A similar process takes place in Venice on the Piazza San Marco where the Procuratie Vecchie of 1480 received their counterpart on the other side about a century later: two originally independent structures which flank the square in front of a dominating religious building.

The arcaded street, though it survived and, together with triumphal arches, was recommended by L. B. Alberti as a feature of revival, was not as popular in Renaissance and Baroque architecture as one might expect. It conflicted with the sense of distinction of individual units and the emphasis on masses inherent in both periods. According to this standard, it was the plastic unit of the monument in the center of the square which, after a rather incidental survival in the middle ages, became the particular feature of revivalism. I have referred above to the equestrian monuments in the Forum Romanum and in Trajan's Forum. As Brinckmann has shown, it is this placing of the statue of a horseman at the center of a square that is, unlike earlier Renaissance solutions, the particular expression of sixteenth century and baroque monumentality.

It was not sheer coincidence that Michelangelo selected a statue of a Roman emperor to adorn the center of the Capitoline Square. The reuse of ancient columns and the erection of new column monuments in the center of squares is a distinct revivalist feature. In the sixteenth century in Rome, Trajan's and Marcus Aurelius' columns were both restored and provided with Christian statues. The former was originally in the center of a small square within the rambling complex of Trajan's Forum. But Scazzozzi characteristically describes it as being in the very center of the whole Forum. The column of Marcus Aurelius had always retained its position in the center of an only slightly incumbered Piazza Colonna. The erection of a column from the Basilica of Maxentius in the center of a square in front of Sta. Maria Maggiore in 1614 is an early instance of many such modern relocations of antique columns in the center of public squares. The reuse of obelisks in the center of squares is well known. The first of the long series of such monuments was that in the Piazza San Pietro, translated in 1586. With the resurrection of a number of obelisks, the next four years each saw an ancient obelisk recreated in the center of a new square in Rome. The last in Rome was that of Montecitorio, placed in 1792. These monuments had been brought to Rome in antiquity with great difficulties in order to decorate public squares and buildings. Two of them stood in front of the Mausoleum of Augustus, others in circuses. But the obelisk of Montecitorio originally stood in the center of a square, and that square had had a mosaic floor so marked that the obelisk served as the giant gnomon of a sundial, casting its shadow on the pavement.

On the whole, I repeat, in city planning as in other fields the Renaissance marks the end of the antique tradition which had still continued throughout the middle ages. The revivals which start with the Renaissance apply primarily to individual monuments, monumental ideas, and, naturally, to plastic detail. But there was one great

avenue of approach to the antique world which now became overwhelmingly important: the ancient literary sources. These are extremely poor as far as city planning is concerned. The most important passage on Greek city planning is a short and rather incidental remark by Aristotle. For Roman city planning, we have only scattered passages in ancient authors. In spite of this situation, there exists a rather amusing problem to which I shall call attention at the end.

The most explicit formal expression of the Renaissance ideal of planning a perfect city is found in the circular or polygonal radio-centric town. With its ornamental ground plan, its center, its radiating main streets, its concentric rings of fortifications and cross-streets, it is a most explicit and mathematical formalization of order. It was only rarely realized in toto, as in Palma Nova (Fig. 17) in the late 16th century, but it played its role in design and in baroque reflections. This regularized plan has its forerunners in medieval schemes like that of Bram near Carcassonne; and Lavadan is certainly right in considering these medieval towns to be typical and non-antique crystallizations of settlements around a church or feudal castle. He has also suggested that this type might have been inspired secondarily by such old oriental models as we see in diagram form in an Assyrian relief. That such circular radio-centric towns actually existed in the Near East is known from the plan of the Hittite town, Sendjirli, the wide circular ring of which seems to belong to the early centuries of the first millennium B.C. However, such prehistoric concentric fortifications exist in other regions too. In Italy itself, in Istria, we know a great number of them called, locally, "castellieri." One of these later developed into the Roman town of Pola, part of which had such a radio-centric scheme.

I doubt, however, whether any of these forerunners inspired the new and abstract Renaissance formula, and I should like to suggest a possible relationship of this type with Plato's famous description of the circular utopian town of Atlantis with its concentric walls, its palace in the center, and its circular water channels. For this conception, Plato, in turn, might well have been inspired by hearsay from the east or, as has been suggested, by Carthage whose circular artificial harbor with its central island on which stood the admiralty building is described by an ancient source, and is still recognizable today. However that may be, the circular town was mentioned as an ideal by Alberti, in a sentence following another direct reference to Plato.

Shortly after the middle of the fifteenth century, the radio-centric ideal of the perfect town is amply described in the strange mixture of Platonic dialogue, Apuleian fiction, and Vitruvian handbook, in which Filarete told a Renaissance architects' dream. Filarete's radio-centric town, revived from an ancient book, reflects Plato's in its water channels for communication along the streets, and in many other details. Among other things, the description of the harbor is quite clearly derived from that Platonic vision. Then, too, like Plato's utopian Atlantis, Filarete's is named after a ruler--Sforzinda--and situated in a beautiful imaginary landscape paradise. Even the size of the town, with its diameter of 28 stadia (sic!) corresponds almost exactly to that of Plato's with a diameter of 27 stadia. This connection, which strangely enough seems to have remained unnoticed, is of considerable importance because it was Filarete's utopia which survived in the ideal radio-centric towns of the sixteenth century circles by Fra Giocondo and Jean Duerceau. And the plan of Palma

Nova, as well as many subsequent partial town plans of radio-centric form, were ultimately rooted in this tradition.

But the main literary source of the Renaissance for this field was, of course, Vitruvius. By a pure and thoroughly undeserved chance, this not over-intelligent and rather reactionary little architect of the Augustan age came to be the great mediator between antique and modern architecture. His poor handbook really contains nothing about city planning that would give any picture of a Roman town. The chapters related to this subject are particularly odd and ambiguous in character. Instead of giving an abstract of planning, he makes a few veiled remarks of a polemic nature against some common practices such as the use of a straight line of streets from the city gates. Then he goes off on a long discussion about winds, in which he exhibits all his half digested knowledge about that unarchitectural subject and recommends an abstruse layout of streets turned away from the bad winds. Fortunately, nobody in antiquity ever tried it. This is, incidentally, the same treatment he gives the Doric frieze for which he recommends a new solution that was actually used only by modern revivalists.

The interesting thing is that from the Renaissance on, in reconstructing Vitruvius' town on the basis of a remark which he made about the undesirability of 90° angles in city walls for purpose of defense, most illustrators jumped to the conclusion that it corresponded to the ideal type of a round or polygonal Renaissance town. Accordingly they drew it as we still see it in a late eighteenth century descendent of the Renaissance tradition (Fig.18), struggling to avoid the bad winds by a curious network of impossible streets. A New Yorker may sympathize, however, with this last result of a long and varied tradition.

MARS, THE UNWITTING ARCHAEOLOGIST

The Architectural Review of London reports, in its Marginalia, a rumor (they call it "rumour") that RAF reconnaissance photographs taken over the Continent are continually recording crop marks that reveal ancient roads, villages, and camps. We may expect, therefore, the ironical paradox that the present onslaught will produce a flood of post-bellum British and American doctoral theses dealing with German and Italian sites. If the Luftwaffe could have held out, they might have been able to return the compliment. Perhaps ASAH should recommend basic archaeological instruction for all United Nations' pilots. With it they might be better able to spot that proto-subtagassuidical pretender to architecture at Berchtesgaden.

MEDIEVAL TOWNS

by Leopold Arnaud

Since man is a gregarious animal, his attempts to reduce his gregarious living to an art and a science are as old as recorded history. But in the Western world during the ancient period, the majority of planned cities were in the Mediterranean basin. The towns of Occidental Europe outside of Italy are for the most part post-Roman, owing their plan and character to the society, economy, and history of the Middle Ages. True, there were many Roman foundations beyond the limits of the Mediterranean basin, but these were for the most part military camps and trading posts. Also, there were the camps and agglomerated dwellings of the Barbarians, which influenced the plans of medieval towns, especially in Germany and in the North. But in spite of exceptions, it is accurate to say that the European town is the product of the Middle Ages.

After the fall of Rome and the disintegration of the Empire, the cities on the Italian peninsula suffered severely from invasion, pillage, disruption of trade, political disorganization, and general lack of social and economic stability. Warfare and misery decimated the population. Rome at its height is estimated at figures varying from 1,000,000 to 4,000,000 souls (the first figure being perhaps closer to the truth), but by the ninth century it had dwindled to about 35,000 inhabitants. Although the drop was certainly not as drastic in other cities, it was nevertheless very great, and from the sixth to the eleventh centuries, city life continued in a state of extreme debility.

It is important to stress the fact that, in spite of general chaos and disaster, the Italian towns preserved a nucleus of municipal government, and thus retained their identity as independent communities, gaining autonomous strength as the central power weakened and disappeared. The city councils, housed in municipal buildings erected for their use, preserved the fabric of civil law, and with this basis for concerted action, the towns were able to muster the power to subjugate the nobles and compel them to dwell within the city walls, thus freeing the countryside from petty warfare and brigandage. This continuity of the municipality from Roman times gave a specific character to the Italian cities which, especially during the Gothic period, were quite different from the towns that developed elsewhere in Europe.

Henry Osborn Taylor, in "The Medieval Mind" (vol. I, pp. 511-512) quotes Salimbene as follows: "In France only the townspeople dwell in the towns; the knights and noble ladies stay....on their own domains." Then he goes on to say: "Only the townspeople live in the towns; merchants, craftsmen, artisans--the unlearned bourgeoisie! In Lombardy how different! There knights and nobles and their lovely ladies have their strong dwellings in the towns; jostle with the townspeople, converse with them, intermarry sometimes, lord it over them when they can, hate them, murder them. But there they are, and what a variety of color and picturesqueness and illumination do they not add to city life!"

The difference in the mode of living inevitably influenced the physical aspect of the towns of North and South. In Italy, even the smaller towns paved their streets, constructed multistoried houses and provided civic buildings and monuments. Changes in style brought superficial modifications, but through the centuries the fundamental Roman character was retained.

Outside Italy, although there were some towns dating from Roman times, most were of post-Roman foundation and did not develop to any degree until the twelfth century. It was during the tenth and eleventh centuries that artisans left the precincts of the monasteries to come to the towns to ply their crafts. With the increase in manufacture came an increase in trade and a consequent wealth and strength which established the town as one of the most important factors in medieval civilization.

Although the northern nobles still lived in castles, waged wars, and lorded over their peasants and retainers, the trends had changed by the twelfth century. The burghers, somewhat at the expense of the nobles, waxed stronger and wealthier, their personal importance augmented by the town organization which represented them and in which they often took part.

Some towns originated as Roman camps and retained their primitive plan; some grew up around monasteries, manors, or castles; a greater number, however, developed on trade routes, at cross roads or river junctions, in other words on sites important from a point of view of traffic. Large centers have always developed under these conditions.

But whatever the origin, the town was essentially a parish, clustered about a church and central gathering place. The village that remained dependent upon manor or castle, depended also upon the nobles' stronghold for defense, but the town made itself a communal castle, often developing all the complexities of fortress defenses. In any case, for toll purposes as well as for general security the town was at least surrounded by a wall as an encircling rim, the town plan developed almost inevitably on a radio-centric pattern.

As the town developed, it needed public buildings; but since land within the city walls was at a premium, and since the inhabitants were few in number, the community could not afford large or numerous civic structures.

In France where the people were converted early to Christianity and where the population was in general friendly to the Church, only one great public monument was built--the cathedral. This structure, built by the burghers as a symbol of the wealth and importance of their town, as well as of their religious fervor, was placed in the center of the town plan; preceded by a modest parvis to be used as a general gathering place, market, and site for the administration of justice; and usually flanked on the south side by another open space used for secular gatherings, theatrical performances, market overflow and the like.

The church plan developed to fill the needs of the ritual of the service; nevertheless, the west end was easily screened off from the choir and sanctuary, so that the nave and transepts were available for secular gatherings. The decoration of the building included both

secular and religious subjects, following an arrangement prescribed by the church, but also complying with the dual destination of the edifice.

By the sixth or seventh century, the older methods of calling the faithful to prayer by crier or clapper had been superseded by the use of bronze bells which needed to be hung in a tower in order to be heard across the town. In Italy a separate tower was erected close to the church. The Romanesque monastic church had the bells in a crossing tower.

But the bell was also a symbol of town freedom and independence. In Italy the town bells found a place in or near the Palazzo del Popolo. In France the cathedral was both church and municipal building, and the architect solved his problem by incorporating two towers in the facade composition. The north or Gospel side of the church was considered the holier, so the church bells were placed in the north tower; while the town bells were hung in the south tower, close to the porch and plaza assigned more especially to secular use.

Germany on the other hand had been christianized at a later date, and the population there had never accepted the church as wholeheartedly as in France. (It was no accident that the Reformation began in Germany.) From the earliest times the German towns had always had a Rathaus no matter how modest circumstances might require it to be. The typical church facade in Germany had, therefore, but one tower, or, if influenced by adjacent French work, only the north tower was carried up.

When the French cities developed a more complex government and acquired greater wealth, new civic buildings were provided, and the town bells were taken from the church to the Hotel de Ville. The south tower thus remained vacant; but the facade design had become traditional and, because of its simple dignity and quiet balance, was retained regardless of function or requirements.

The burghers' houses which clustered about the cathedral were at first built of stone. They were two, or at most three, stories in height with a basement, and often, especially in vineyard countries, with a second basement or wine cellar. These substructures were of stone, and frequently vaulted.

In most town houses the ground floor was occupied by the burgher's shop which had the main opening on the street and a second window on a rear court or garden. The kitchen was also on this court which contained the house privy and the well. The well was often placed on the party line and was used jointly by two neighbors, thereby giving rise to many disputes often referred to in the literature and comedy of the period. Access to the cellar was usually from the street, a custom still preserved in many of our own colonial and early nineteenth century houses. Interior access to the cellar from the house was not usual.

Access to the upper floors above the shop was either by an outside stair (as may still be seen in Viterbo and several other Italian, southern French and Spanish towns) or by a passage or corridor flanking the shop. Above the shop and occupying the full width of the house on the street was the large common room which served as general living room and dining room for the family during the day, and as sleeping

room for the master and elders at night. It was usually provided with a hooded fireplace with a straight flue.

The third floor contained one or two large rooms which served as dormitories, one section for the girls of the family and the women servants, the other section for the apprentices and journeymen attached to the master's household.

The house was usually roofed in tile with the eaves on the street, the roof waters dripping directly into the unpaved street. It was this roofline which gave the most characteristic aspect to the Romanesque town.

The second half of the twelfth and early thirteenth centuries were the great era of civic development. Many improvements evolved which transformed the life and physical appearance of the towns. City populations increased rapidly; commerce and wealth took on new proportions. In France and England many towns won their charters of freedom and received royal favors, an important consequence of the long struggle of the crown to curb the power of the nobles.

Of special interest was the establishment of many urban institutions which until this period had developed in the monasteries--universities, hospitals, orphanages, foundations and others which we look upon today as typical of contemporary civilization.

Philip Augustus, through his improvements of Paris, exerted a far reaching influence upon the development of the town. He founded the University and the Hotel-Dieu, built public fountains, enlarged the city wall to take in the surrounding suburbs, and in 1185 paved some of the major streets--a novelty in the north.

Street paving was usually executed in relatively small blocks, although some examples of the "Roman" blocks are known. The general profile of the unpaved street was followed, a concave section with an open gutter in the center of the street. The central-crown section with elevated sidewalks and lateral gutters, as on Roman roads and in some cities, or the large stone pavement with a flat surface, as in Italian cities, was seldom used. The crowned road with lateral curbs and sidewalks will not become current practice in the north until the repaving of London towards the end of the eighteenth century.

Half-timber houses began to replace the earlier stone dwellings of the burgher about the middle of the twelfth century--proof of the enduring strength of the Nordic tradition. Coincident with the new style in building, changes were introduced which brought about the abandonment of the eave-line on the major street. The roof ridge was turned perpendicular to the street; this brought the water shed either into the narrow alley between each pair of houses, or into a valley formed by adjoining roofs, from whence it reached the ground by an exterior drain or through a gargoyle.

Although sanitation and street cleaning are often mentioned in the documents, little seems to have been done in the matter of removing refuse from the streets. Street lighting was reduced to a few lamps before street shrines, and at infrequent street intersections when the burghers hung a lantern on chains swung diagonally from corner house to corner house.

After curfew the "Ronde du Roi" patrolled the quarters passing in squad formation. Each block paid for a watchman whose main duty was more as a fire warden than policeman, although he had access to all houses on his beat and was supposed to look out for undesirables.

Until the late fifteenth or early sixteenth centuries, when the first city codes and building regulations appear, fire brigades were voluntary organizations; the burghers making bucket brigades from fountain or river to the burning house. In the sixteenth century, however, this important city function was taken over by the Franciscan monks who set up regular fire watches and crews.

As populations grew, land values soared in the wall-bound cities. The first solution of the housing shortage was to build on the garden sites behind the earlier houses, thereby eliminating the light and breathing spaces provided in the earlier town. Sometimes the wall was extended to embrace the suburbs, but this method often met with violent opposition because it immediately increased the rents and taxes of the houses taken in, and because the former suburbanites were then subjected to the toll at the city gates. Protest of this kind was given voice by the satirical play on words which, which was circulated during the construction of the sixth wall of Paris, which was almost exclusively a toll barrier: "Le mur murant Paris rend Paris murmurant." The date was much later (1784-1797) but the sentiment was the same.

As working and living conditions grew worse within the towns, large landowners such as Edward I of England and several French kings, bishops and nobles, invested in large-scale land speculation and improvement by planning bastides--usually near a town suffering from overcrowding. These plans are too well known to dwell upon here. They are interesting, however, for the order and adequacy of their layout which again provided the advantages of the earlier medieval towns. There were individual houses and backyards; the church and main square were centrally located. An innovation, also in the center of the town, was a separate market square with an open shed for neighboring peasants who came with their animals and produce. Streets were so arranged that vehicular traffic circumvented the market place, leaving it free for pedestrians.

The planners of these towns were coping with the same problems that we are trying to solve today, and the system of layout, selection, financing and advertising remind us of our twentieth century housing developments. These bastides and villes-franches incorporated some of the assets and some of the defects of contemporary communities, but for the most part they were carefully organized and well built, and many are still in use after more than five hundred years of continuous habitation.

The townspeople congregated in islands of buildings according to trade. Each group was small enough to be a closely knit unit which fostered community interest and pride. Each trade was governed by a guild which was much more than a trade-union, for it regulated not only the conditions of production for the craftsman, but also his education, recreation and physical and spiritual well-being. Furthermore, the guilds had the additional importance of being close to municipal legislation, for the town as a whole was governed by a council of guild-masters, and later by the major one of these--the Provost of the Guilds or Major of the Corporations of the town.

What significance has all this for us today?

The medieval town is of interest because we find there the early form of many institutions which had their origin in the monasteries and which continued to develop into the organizations that we know today: the guild, the city government, hospitals, asylums, hostels, schools. We see also a general conception of the town that our contemporary planners hold up as the desideratum for the future.

After an era of magnificent vistas, great avenues, monuments and statues which beautify the city without really serving it, great highways which enrich the vistas but complicate the traffic problems and hide the overcrowded living conditions, we are striving today to regain the very quality the medieval town achieved not as much through preconceived planning as through cold common sense.

Through the system of trade quarters, there was no segregation of the wealthy, but an intimate mingling of the various classes, which produced a more equalitarian society than is possible in a town divided according to economic groups. Furthermore, the worker was close to his place of labor, and the town was sufficiently small so that recreation in the countryside was enjoyed with convenience. The guild system, though wasteful and restricting in many ways, provided social benefits which we are striving to achieve today.

As we look at the development of European cities throughout the Renaissance, we forget oftentimes that the qualities we so admire in the medieval towns are found, in essence, in the early townships in our own country. These early American townships began with a very similar plan, but the mode of life to which they conformed was destroyed by the growth of industrialism during the past century.

Leopold Arnaud is Dean of the School of Architecture, Columbia University. He graduated from the Sorbonne and Ecole des Beaux-Arts, gained valuable practical experience in New York, and did his graduate work in architectural history at Columbia. This paper was presented at the inaugural meeting of the New York Chapter of ASAH, April 13, 1943.

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DEAN ARNAUD IN BUENOS AIRES

Professor Leopold Arnaud, Dean of the School of Architecture, Columbia University, is spending July and August in the Argentine Republic as exchange professor at the University of Buenos Aires. Dean Arnaud will give a series of lectures in Spanish on the history of architecture in the United States. Dean Arnaud indicated to us just before his departure that he intended to inform our South American colleagues about the aims and program of ASAH.

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EARLY TOWN PLANNING IN NEW YORK STATE

by Turpin C. Bannister

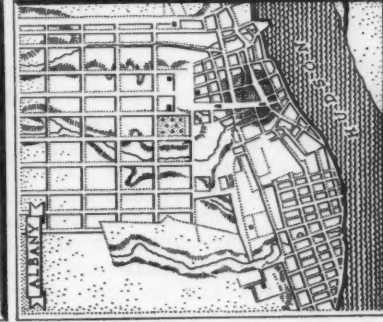
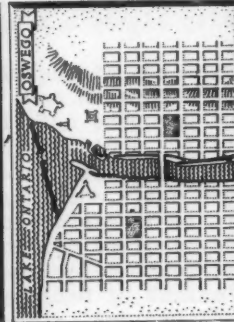
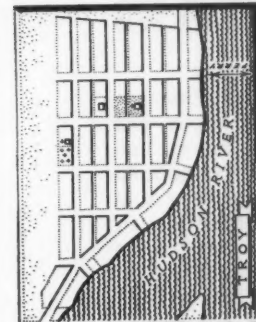
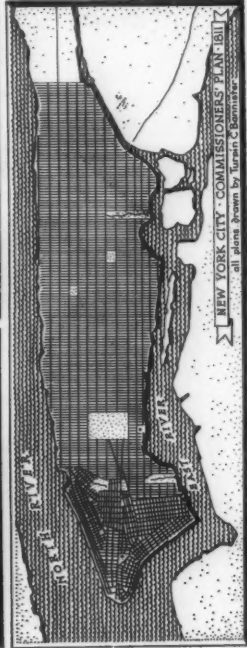
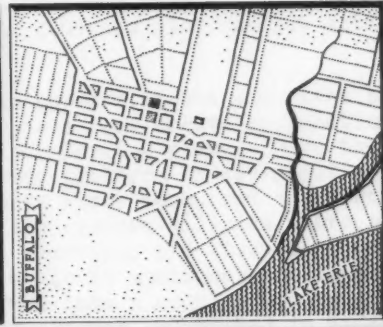
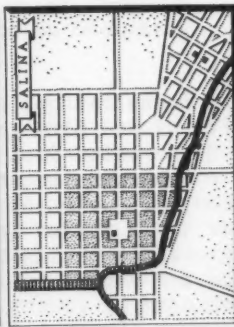
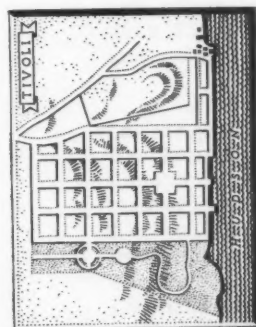
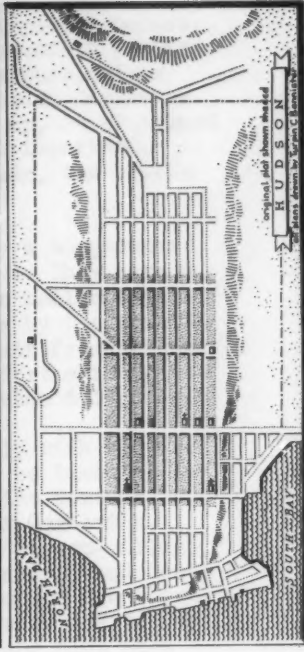
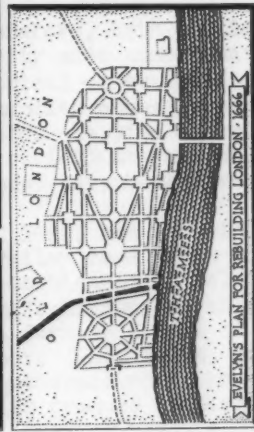
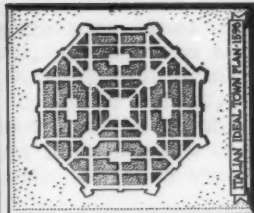
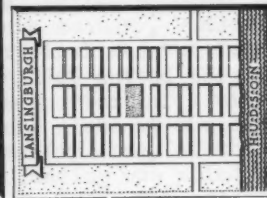
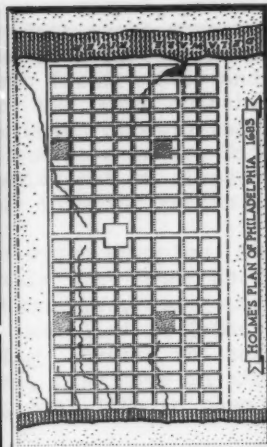
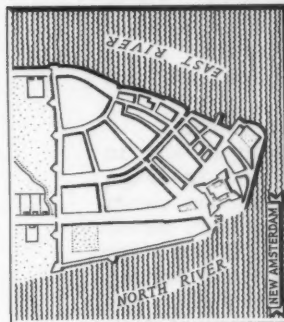
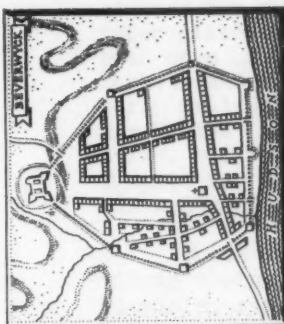
Just as buildings reflect the needs, skills, and aspirations of their builders, so too does the form of hamlets and cities reveal the communal requirements, the technical ingenuity, and collective dreams of their founders and citizens. The streets we tread, the plots we build on, and the urban paraphernalia we use each day comprise a pattern initiated for better or worse by our forebears, and constituting a cultural inheritance whose roots and evolution have too long been neglected.

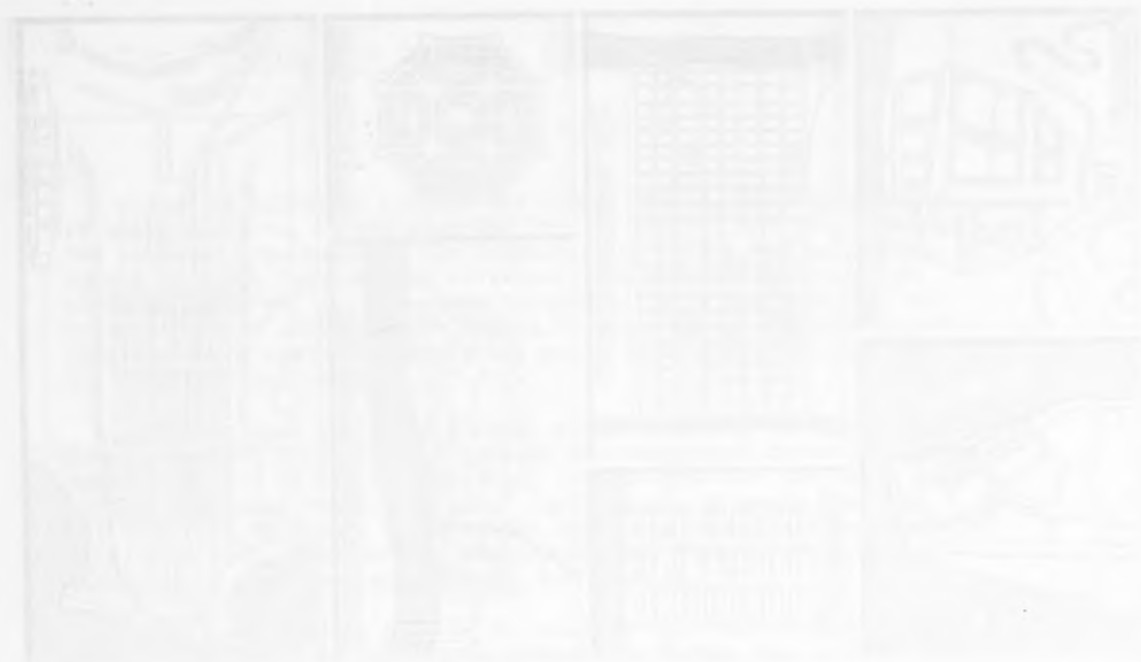
The business of living demands space to dwell, work, and play. Among primitive folk, these functions are simply and forthrightly accommodated, but in mature societies, the elements are obviously more complex and their resolution more perplexing. In every age, the felicity with which men organize the intricate relationships of dwelling, work shop, institution, playground, and street, measures the character of their courage, energy, and justice.

It is our present purpose to consider the foundation and early growth of a number of York State communities during the Colonial and Early Republican periods. Dutch, English, and early American citizens each evolved a different character in their towns quite independent of their highly differentiated styles of building. This difference of character is all the more intriguing because the influences of geography and climate remain relatively constant. Throughout, it was a period of colonization to exploit the boundless riches of the Empire State.

In Dutch New Amsterdam, the Castello plan of 1660 reveals 1,000 inhabitants clustered on Manhattan's southern tip. Northward from Fort Amsterdam with its chapel, governor's house, barracks, and prison, stretched Broadway to the gate at Wall Street. From the eastern Strand (now Pearl Street) ran Broad Street--with its typical Dutch canal--bending north to parallel Broadway. Narrow by-lanes connected these north-south ways and completed the irregular but practical street pattern. Shipment of beaver pelts naturally centered along the Pearl Street waterfront where the West India Company's pack house stood. In the narrow blocks behind, gabled houses elbowed each other, but in the outskirts near Wall Street, dwellings enjoyed spacious rear yards often neatly gardened. On upper Broadway, the Company's formal garden with its ornamental gate and summer house overlooking the North River comprised New York's first public park. For more robust sport, Bowling Green provided ample space.

No plan remains of the first Walloon settlement at Fort Orange, built in 1624 on the river bank just north of Albany's Memorial Bridge. By 1643, it was a straggling group of thirty thatched cottages. The nucleus of present day Albany dates from 1652 when Peter Stuyvesant, Director-General of the West India Company, disputed the settlement with the patroon, and laid out the new village of Beverwyck on the higher





ground just northwest of the fort. Handler's Street (now Broadway) followed the road north to the Mohawk. Jonkers Street (now State) climbed the ridge westward, probably following an ancient path to the upper plateau. Both these streets were soon lined with gabled houses; both were unusually generous in width, no doubt to accommodate village markets and civic festivities; and their junction was emphasized as early as 1656 by the Dutch church. Up State Street, Vodden Market or Rag Market (now Green Street) led south, while farther up, Pearl opened north. Of the numerous lanes, Maiden Lane was the most important. Despite the premium put on sites within the town stockade, the blocks all had generous interior gardens.

These two Dutch examples, therefore, both display a compactness within their walls that later security made unnecessary. They have a flexible, craftsmanlike, non-geometrical order found in medieval villages, perhaps instilled in Netherlandish consciousness by the tradition of combining streets and canals. Despite a certain frontier and rural earthiness, they have an air of intimacy and comfort which gives one the feeling that life in them must have been more than tolerable.

After the English conquest of 1664, and especially with the turn of the eighteenth century, Hudson valley land began to be taken up for cultivation. Typical was the farm settlement of Palatine Germans whose cabins in 1709 dotted the King's Highway north of Quassaick Creek for three-quarters of a mile, forming a sort of "street-village," with the 500-acre glebe at the center. When Dutch, English, and Scots joined the community, many of the Lutherans moved on to new frontiers. Soon the river landing was piled with produce waiting shipment to New York markets. In 1752, the steep slopes of the old Glebe plot were subdivided into a series of regular, rectangular blocks, creating the new river town of Newburgh. Lots along King's Highway and Water Street were first to be occupied. A generous plot was set aside for church and school.

A more sophisticated plan appears in the new river town of Lansingburgh, laid out in 1770 as a real estate speculation for Abraham Lansing just below the Hudson fording place. Here the surveyor, Joseph Blanchard, designed a tidy gridiron of rectangular blocks, numbering three along the eastern river bank, and six across the flat alluvial valley floor to the eastern hillside where settlers were given rights for pasture, firewood, and timber. Notable is the central village square which, while it continues the tradition of the New England green, is transformed into a regular and symmetrical park such as William Penn's surveyor, Thomas Holme, had in 1682 repeated five times in the simple gridiron plan of Philadelphia.

Philadelphia's checkerboard served as model to so many American communities that we should note its origin. Its immediate source was the rejected plan proposed by John Evelyn for rebuilding London after the great fire of 1666. In it, open squares were sprinkled liberally throughout the regular street grid. Evelyn perhaps was thinking of the new square, the Place Royale, in Paris, or, even more likely, he remembered the plans of military camps and ideal cities which Venetian architects of the early seventeenth century were developing from ancient Roman examples described by the classical architect, Vitruvius. Evelyn had resided in Venice for a year of his Grand Tour. Thus, through a fascinating genealogy, the gridiron civic pattern interspersed with formal open plazas descends from Roman military towns to the peaceful banks of the Hudson.

Still another feature links Lansingburgh to Philadelphia. There, just after the middle of the eighteenth century, the growing prevalence of contiguous town houses blocked any service access to rear yards. This was remedied by cutting narrow alleys through the center of each block. Many of the newly established towns, such as Lansingburgh, adopted this questionable expedient along with the basic pattern.

With the successful conclusion of the Revolution, New York State town life took on new energy. Old villages spurted forward by leaps and bounds. In 1782 Benjamin Smith, foreseeing that many Revolutionary veterans encamped around Newburgh would settle there as soon as they were disbanded, subdivided his farm with streets dovetailing the grid already established on the old glebe plot.

The peaceful Hudson attracted many New England Yankees. Some came as individuals; others in large organized groups. Such were the twelve associated proprietors led by Thomas Jenkins, who in 1783 moved their war-ravaged ships from Providence and Miantucket, bought Claverack Landing, and built the first town of Hudson. Its beautiful natural site included a long ridge perpendicular to the river into which it projected as a rocky promontory forming on each side sheltered landing coves. Soon Cotton Gelston, the violent-tempered surveyor, laid out a regular grid of long rectangular blocks along the ridge and sites were carefully allocated to ensure symmetrically disposed church steeples. Later, the proprietors proved their unusual concern for civic amenities by dedicating the river promontory as a public walk named "The Parade" from which opened magnificent vistas of shimmering river and Catskill sunset. Many other river towns have stupidly frittered away equally superb opportunities.

Yankee merchants at Lansingburgh soon discovered that sloops for New York had to be loaded in mid-channel. Looking for more convenient docks, they prevailed upon reluctant Jacob D. Vanderheyden, in 1786, to undertake a speculative subdivision of his farm south of Lansingburgh and sell them excellent water front lots in this newly created Troy. He copied Lansingburgh, grid, alleys and all, except along the river where an existing curving road was retained. The "patroon" remedied his omission of a village square by later contributing lots for Court House, Presbyterian Church, and village school, forming a civic center on Congress between First and Second Streets.

Not every venture along the river was so successful. Opposite Hudson, Esperanza (now Athens), ambitiously laid out by Edward Livingston in 1790, failed to click. In 1798 Peter de Labigarre's model town of Tivoli had an elaborate gridiron plan replete with Zephyre Square, river quays, and the proprietor's feudal chateau. Its designer was Saint-Memin, the industrious silhouettist, but he certainly could never have visited the precipitous site, else he would have quickly realized how ill adapted to it was his pretty paper plan. Chancellor Livingston bid it in at the foreclosure sale.

As new life poured into the old colonial towns such as Albany and New York, their narrow, winding lanes no longer satisfied forward-looking citizens. By 1790, Albany's thirty-five hundred inhabitants had spread their houses up the hill to Eagle Street, north to Patroon (now Clinton), and south to Lydius (now Madison). Four years later Simeon De Witt, veteran army geographer under Washington and now Surveyor-General of the infant Empire State, drew up a plan for future

additions to the city. To the south, in an area bounded by Madison, Fourth, South Pearl, and the Hudson, he plotted a series of square blocks cut by narrow alleys. On the hill west of Eagle Street he imposed a wide band of unusually large rectangular blocks reaching from Clinton on the north to Madison on the south.(1) At the head of State Street, where Fort Frederic had stood, De Witt magnanimously provided two half-blocks as open sites for public buildings, later ably filled by Philip Hooker's Capitol, Academy, and City Hall.

Hooker, as City Surveyor, from 1819 to 1832, in charge of applying De Witt's plan to the deep ravines of Beaver, Rutten and Foxes Creeks, publicly despaired of a successful solution to this insoluble problem. One might have expected De Witt, one of the foremost surveyors of the day, to have adapted his plan more realistically to the site. L'Enfant in Washington had already exploited topography to make Capitol and Executive Mansion dominate the Federal City. Perhaps De Witt was rebelling against the picturesque unmonumentality of the old Dutchtown below; perhaps as a land surveyor he yearned for easily computed property lines; or perhaps in the spirit of the exuberant nineties, when anything seemed possible, he impatiently decided that geometrical perfection was worthwhile even at the cost of Herculean grading.

But it was central and western New York, now cleared of hostile Indians, that formed the mecca of migrating Yankees. There, in contrast to New England's rocky hill tops, millions of fertile acres awaited axe and plow. Some few portions were distributed by the State, but most were sold by speculators. Soon an orgy of town platting began, and by 1820 the nuclei of most of our present day communities had been established.

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- (1) De Witt here seems to have followed and expanded a plan of 1764, which had been prepared by the city fathers to show an attractive plot on the southwest corner of Eagle and State (later a cemetery and so marked on the accompanying plan), which they proposed to give to Rev. Dr. Eleazar Wheelock as an inducement to bring his newly enriched Indian Charity School to Albany. They lost, however, when Wheelock moved to Hanover, New Hampshire, and rechristened his institution Dartmouth College. This 1764 plan was destroyed in the 1911 fire of the State Library, but is known by its reproduction in Joel Munsell. In it, the hilltop is shown subdivided into sixteen blocks, each containing approximately six acres. The eight western blocks were marked "Pasture Lots." Since Yates's map of Albany, 1770, does not show any streets in this neighborhood, it is improbable that any were immediately staked out. In 1794, De Witt's plan shows five houses along Lion St. (now Washington), but since this was the old highroad to Schenectady, they do not prove that the 1764 scheme had been installed. Two properties south of Deer Street (now State), however, might either be on old tracts extending from the Schenectady Road to the Rutten Kill, or, if fronting on Deer, would indicate that at least one of the 1764 streets had been laid out. De Witt very probably knew the 1764 scheme, and, in any case, greatly enlarged it.

Many of the new towns like Utica began as cross-roads hamlets and slowly expanded along radiating highways without benefit of studied plans. In general, however, the proprietor or speculator modeled his new settlement on the checkerboard grids so popular along the Hudson. Some indeed were actually designed by the Surveyor-General. In 1797, for example, De Witt was ordered by the Legislature to lay out Oswego on the west bank of the mouth of the Oswego River with "proper streets and house-lots, and to form in the most convenient place a public square or a market place." In 1814, John Randall duplicated the relentless gridiron on the precipitous eastern bank. Again in 1798, one year after Oswego, the Legislature, in order to exploit the new Salt Spring Reservation, directed De Witt to set out Salina with sixteen blocks, each with four house-lots, and with the inevitable central square. Liverpool and Black Rock also were his creations.

When in 1801 Joseph Ellicott of Maryland took up his duties as agent for the Holland Land Company, he immediately selected a terrace overlooking Buffalo Creek as a splendid site for a great lake port. To the standard New York checkerboard with central square, he added several features from L'Enfant's masterful design for the new federal capital, Washington. The connection was quite definite, for after the recalcitrant Frenchman's dismissal, Ellicott's brother, Andrew, had been employed to stake out its radiating streets and monumental plazas. These were the inspiration for Joseph's impressive diagonal avenues and auxiliary courthouse square. In 1804 the first lot was sold. Ellicott, though a Quaker, felt that his official status required a residence of more than usual dignity on a site of inescapable importance. So he reserved Lot 104, one hundred acres fronting along two blocks of present Main Street. Radiating from a semicircular plaza into which his entrance gate projected, five avenues would provide superb vistas framed by churches. The correspondence of this setting with that of the White House in Washington is striking. Unfortunately this grandeur was not appreciated by the local Commissioners of Highways who soon eliminated the plaza. Thenceforth, Ellicott resided in Batavia.

The most famous New York plan of this early period was the subdivision of Manhattan Island. During the eighteenth century the crooked Dutch streets had pushed north to Beekman's Swamp. Besides Whitehall and Bowling Green, a new civic square at Broadway and Wall was created to provide a fine setting for Trinity Church and the Governor's House, behind which, at the head of Broad, stood the new City Hall. On Ratzen's Plan of 1767, regular rectangular blocks begin to appear west of upper Broadway. The triangle between Broadway and the Bowery becomes "The Green," while up along the Bowery, small gridiron subdivisions take form, each perpendicular to the winding highway, but seldom parallel to each other.

In 1800, Joseph Mangin, French emigre just appointed architect of the new city hall on the "Green" and also city surveyor, presented before the Common Council the first comprehensive plan for opening up land to the north. Many of Mangin's suggestions were excellent; for example, the extension of Broadway as an axial artery, supplementing the Bowery and leading directly into the Boston Post Road (now Third Avenue) and Bloomingdale Road (now upper Broadway). He planned a girdle of orderly blocks with open quays around the whole waterfront, even continuing them on filled land around the Battery. Interior areas, though too irregular to permit all street grids to have the same orien-

tation, were nevertheless carefully studied to ensure a number of continuous north-south arteries. Where commerce was expected to develop, blocks were small and streets close together; in residential areas, blocks were more spacious. Parks were not forgotten. Many awkward street intersections were studied to secure effective monumental plazas easy to use and impressive to view. The gracious and systematic tradition of eighteenth century French urbanism was here, as at Washington, transposed to the American scene.

Unfortunately, Mangin's ideas were shelved and the pseudo-practicality of the land surveyor substituted. In 1811, after four years of work, three Commissioners of Street and Roads produced the plan which became the framework of the modern metropolis. That the commissioners immediately renounced "supposed improvements by circles, ovals, and stars, which certainly embellish and plan, whatever may be their effects as to convenience and utility," and observed "that a city is composed principally of the habitations of men, and that strait-sided and right-angled houses are the most cheap to build and the most convenient to live in" should not surprise us when we learn their names: John Rutherford, Gouverneur Morris, and our old friend, Simeon De Witt. The first two, lawyers, statesmen, and land speculators; the last, surveyor and geographer. So in the name of duty and prudence they imposed an almost unbroken gridiron on a vast area reaching from Houston Street to 155th, and from East River to the Hudson. Although over thirty per cent of the land was devoted to streets, the commissioners, believing that the land traffic would continue to gravitate to the water front, gave two and a half times more area to east-west streets than to north-south avenues.

Although the island was "well wooded, broken by hills, and diversified by water courses," they assumed a ruthlessly levelled site upon which the surveyor's straight edge could rule supreme. No attempt was made to deal with the island's perimeter. No quays linked streets ending at the water line. Nor were any diagonal streets permitted to continue the function of the early roads. It is perhaps unfair to condemn these commissioners for failing to prognosticate modern vehicular traffic; but surely their claim to common sense can hardly be allowed when, of eleven north-south avenues, only one provided an unbroken artery.

Obedient to a narrow concept of thrift, the commissioners incorporated a minimum number of public open spaces. Largest was "The Parade," a 69-acre plot between 23rd and 34th Streets and Third and Seventh Avenues, for "military exercise, and also to assemble....the force destined to defend the city." A 55-acre plot at East Ninth, too swampy for private use, was designated as a Public Market to be canalized for market boats. A five-block site on Fifth Avenue at 90th was euphemistically labelled "Observatory Place," but really intended for a water reservoir. Except for these and Harlem Marsh, only four small parks were allotted to an area approximately two by eight miles. The excuse given was that "those large arms of the sea which embrace Manhattan Island render its situation, in regard to health and pleasure, as well as to convenience of commerce, peculiarly felicitous" and "the price of land is so uncommonly great," though most was still in farms.

So a magnificent opportunity was muffed. What might have been the loveliest city in the world became instead the surveyor's paradise of right angles and standard lots. The checkerboard that in Linsburgh had symbolized civic order and unity was here multiplied a thousand

and fold to achieve stolid monotony. The up-state gridiron plans had the excuse that they never were intended to expand indefinitely. Manhattan's commissioners produced an endless and stultifying straight-jacket.

The great age of town-founding closed with the myriad communities which rose to punctuate the course of the Erie Canal. After the 1840's New York city planning entered a new phase preoccupied with problems inherent in rapid growth and industrialization. These new conditions evoked the slow and painful discovery of new principles and the development of new procedures--a story well worth telling. Needless to say, early plans could not foresee conditions of today; but as the foundation and cradle of our present life, and as a measure of our forefathers' dreams, they command our thoughtful attention.

Mr. Bannister is Associate Professor of Architecture at Rensselaer Polytechnic Institute. The material for this paper which was presented at the inaugural meeting of the New York Chapter of ASAH, April 13, 1943, grew from researches conducted while he was architectural editor of the New York State Guide, 1938-40. The paper also appeared in New York History, April, '43, and the cuts of the illustrations here reproduced are lent by courtesy of the Director of the New York State Historical Society, Mr. Clifford L. Lord.

AVEBURY GIVEN TO NATIONAL TRUST

Through funds provided by Mr. I. D. Margary and the Pilgrim Trust, Great Britain's National Trust has recently acquired one of the most important European bronze age sites, that at Avebury in Wiltshire. Once consisting of about 600 stones ranged in two double concentric circles, only six remained erect when in 1925 the owner, Mr. A. Keiller, and H. M. Office of Works cooperated in beginning systematic exploration of the site. Since then, its former impressiveness has been partially recaptured by the reerection of some of the megaliths, by repair of others, and by the construction of concrete pillars on spots occupied by those quarried for nearby buildings.

ON C.I.A.M.'S UNWRITTEN CATALOGUE

by Sigfried Giedion

In the review of Mr. J. L. Sert's "Can Our Cities Survive?" which appeared in the last issue of the JOURNAL, Mr. Carl Feiss complains that "the work of the C.I.A.M. (Les Congres Internationaux d'Architecture Moderne) remains to us both vague and esoteric," and asks whether a catalogue of the Congress' work is available. Sometimes such a misunderstanding as this proves fruitful in the end by providing an opportunity to clarify the situation, and I therefore take this occasion to comment further on C.I.A.M., its methods and its aims.

First, let us consider the methods used by C.I.A.M. In order to discover contemporary practices in architecture and urban planning, C.I.A.M. chose actual problems that needed solution. At the same time, it desired full and accurate knowledge of existing conditions, indeed it would have liked to have had, if possible, a survey worldwide in scope. To this end, a questionnaire and standardized system of graphic representation were developed and circulated among the several far-flung C.I.A.M. groups. By this use of a common technique, it has been possible to study with ease the procedure and principles employed in solving many comparable problems no matter where they had been undertaken. It would have been helpful to have Mr. Feiss' constructive comments on these symbols and graphic representations.

These methods of research were not restricted to architecture alone. They have had a far wider meaning. They have tended to counteract excessive specialization, and have materially aided the attainment of a really integrated approach. They have been extended to almost every field. They might, in fact, be adopted with profit by architectural historians, who, instead of working in isolation, could confer together as to the most urgent unsolved problems in their field, and how these might be best attacked.

To me, there seems nothing esoteric or vague in C.I.A.M. procedure. Both C.I.A.M. and its methods appeared in response to existing circumstances. The problems confronting C.I.A.M. at its beginning in 1928 were in many respects similar to those facing us today. There was, for example, the question of winning public acceptance of the new architecture. Today, its modes of expression are, by and large, taken for granted and accepted nearly everywhere. But there is still an attitude of scepticism on the part of the public and officials toward their use in public work. Except in a few countries such as Sweden, Finland, Holland, Switzerland, and, recently, South America, public buildings are still clothed in an obsolete academic style, just as in 1928.

Another important question was the necessity of attacking complex present-day problems collaboratively. Le Corbusier once said, "In C.I.A.M. we tackle only those problems which none of us can solve alone." Personalities and personal research problems were not recognized. Members did not lecture before each other. Rather, there were common problems undertaken by assigning to several members different aspects on which to report.

No doubt, there are some important modern architects who prefer to work as individuals. But there were others who, by joining together in C.I.A.M., as individuals doing group work, became dynamic forces in the new development. It is to the credit of C.I.A.M. that this paradox was possible. Meeting together, these individualists found a common denominator.

The founders of C.I.A.M. were also the founders of contemporary architecture. Thus it is difficult to separate the work of C.I.A.M. from that field. It was a reciprocal process: architects inspired C.I.A.M., and C.I.A.M. educated the architects. Not all countries, of course, were ready to use this system. In some, it will never function; there are others, however, like Holland and Switzerland, where public opinion was gradually won over by the very results of this group work. All of us who gathered so many times around those conference tables are profoundly influenced in all our work by the education received there. Van Eesteren, president of C.I.A.M., both educated and was educated by C.I.A.M., and he once declared that he could recognize in the architecture of any country whether there were working in it any group which had partaken of this process of self-education.

C.I.A.M. is no assembly of celebrities. It has always tried to forego overexpansion in order not to lose its working power, but its doors are open wide to young architects in a special kind of membership.

Although the development of C.I.A.M. has been outlined in each of the four volumes so far published, no catalogue of its work is yet available. I fear that C.I.A.M. is not sufficiently interested in bibliography to undertake such a catalogue. Some day, perhaps, when historians wish more insight into the rise and course of contemporary architecture since 1928, they may consult our Zurich files which overflow with questionnaires, correspondence, and carefully inscribed minutes. Sample questionnaires, however, have been published in Le Corbusier's "Ville Radieuse" and the Questionnaire International on "Air-Son-Lumiere."

Perhaps all this would be of but secondary importance. The function of C.I.A.M. should not be judged by questionnaires or congresses alone. Rather, it should be evaluated by such living, vital performances as the Amsterdam Master Plan and by its doctrines, as now taught in one great American university. Frankly, I was surprised that a town planner like Mr. Feiss seems more concerned with the historical insets, a minor part of the book, than in criticizing the Athens Chart, which forms its backbone.

One does not ordinarily require a gardener, busy discovering the deficiencies of his soil, to produce simultaneously a crop of juicy, tempting apples from an undernourished tree. Nor is it fair to ask of a book, chiefly concerned with the analysis of pathological conditions, to materialize definitive solutions. It was the aim of C.I.A.M. and of "Can Our Cities Survive" (whose text, in accordance with C.I.A.M.'s mandate, is exclusively Mr. Sert's, as I pointed out in my introduction) to arouse public consciousness as to the present state of our urban agglomerations. Until people become aware that decent living is impossible within our intolerably chaotic cities, no real transformation can take place. The book was written and published because people do not yet recognize that city life as we now know it blocks them from achieving essential vital values. Cities would never have been so degraded to their present state if such a consciousness

had existed. Even much of our so-called progressive post-war planning is conceived in the belief that our cities should "continue to be a decent place to live in." (P-M, July 4, 1943)

Naturally, it goes without saying that analysis is not, in itself, the foremost interest of the leaders of contemporary architecture. They are much more concerned with new solutions. And most of the solutions produced in our time for the structural regeneration of our cities, have, as far as I know, been due to members of C.I.A.M. But C.I.A.M. could not have avoided analysis. Why? Because those who should have furnished the necessary data for comparing the problems of different countries--the international housing associations, the statisticians, the historians--never furnished it.

Nevertheless, analysis was only a first step. The small booklet, "Logis et Loisirs," issued for the Fifth Congress held at Paris in 1937, states C.I.A.M.'s aims. Of all our publications, this was the most direct and informative because it shows our method in arriving at decisions and solutions. Usually we had refrained from publishing preliminary steps, but in this case Le Corbusier, the organizer of the Paris meeting, simply put together the raw materials we had sent from Zurich. In it, is evidenced our concern with rural urbanism, our proposals for "solutions de principe" for the reorganization of blighted areas, regions, et cetera.

True, there were no illustrations, but to surmise what might have resulted, in works and publications, we can peruse Le Corbusier's "Des Canons, des Munitions? Merci; Des Logis S.V.P." (Paris, 1938). This book, with its prophetic cover illustrating bombs and bombers, included a chapter, "Preparations des travaux du prochain 6^e Congres C.I.A.M." But there was no sixth Congress; catastrophe intervened. There was war!

To return to Mr. Feiss' review, he stresses the fact that American members of C.I.A.M. were "mainly American citizens of foreign origin who had gained their stature in architectural practice in their native countries." I confess that I was not sure as to the composition of the American group. Therefore, I inquired of the first secretary of C.I.A.M., Mr. H. Harris, the California architect, who replied: "It is true that the Congress' work done in the U.S. was not done by representative American architects. But this is not a criticism of the Congress, but of the representative American architects, who had absolutely no interest in this sort of planning in 1930." Of the American group, Mr. Harris writes that only a third were foreign born and educated, while two-thirds were native Americans with American education. I hesitate to mention these facts because they contribute little to our discussion.

Mr. Feiss is quite right in saying that "There was no reverberation of the activity of the C.I.A.M. in this country," and that "the C.I.A.M. did not receive any important place in any American architectural journal of the period." The cause is quite understandable. The problems which concerned us in 1929 and 1930, housing, neighborhood units, et cetera, held no interest for American architects, magazines, or public. Housing, an American member has informed me, was regarded as merely a European problem. In Europe, however, the situation was not very different at the time the "Chart of Athens" was published in 1933.

There can be no doubt that American and European problems must be solved in different ways, according to the conditions existing in each region. But I do not believe that the great architectural problems of our age are localized in either Europe or America. It was inevitable that the problems of housing and urbanism should have become prominent in this country also.

I cannot know, of course, what C.I.A.M. will be after the war. We are at the moment concerned more with the personal fate of our friends, than with their architecture. Members of the Spanish group are dispersed; some are no more. We do not know whether several of our best Polish collaborators are still alive, nor of those Czechoslovakia, Hungary, and Greece. Contact with the Dutch group, which worked so valiantly throughout C.I.A.M.'s career, is completely cut off. For this reason, no list of responsible officers could be included in "Can Our Cities Survive?"

Thus, at the moment, C.I.A.M. has been silenced and dispersed by the course of inexorable events. Today, it lives only in individuals whose spirits were disciplined by a decade of close collaboration. C.I.A.M. always stood as an invisible help in all our work, and so it would not be surprising if some of these friends, now actually living under enemy terror, may already have formulated a program of action which C.I.A.M. can undertake once free will is reestablished.

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THREE NEW HISTORIES PROMISED

Our grapevine brings news of three long-awaited treats for architectural historians. Publication of "The Creation of the Rococo," by Fiske Kimball, Director of the Philadelphia Museum of Art, and member and director of ASAH, is announced for October 1. Second is the much needed history of the Greek Revival in America by Talbot Hamlin, Avery Librarian at Columbia University, member of ASAH, and chairman of our New York Chapter. The Oxford Press promises it this fall. The book will be the first comprehensive and scholarly study of this important period. The third history is a complete revision of "The Architecture of Ancient Greece" by William Bell Dinsmoor, of Columbia. This work at long last will provide an up-to-date and thorough description of a field that has grown rapidly in the past twenty years through re-study of monuments already known and through the recovery of new material by systematic exploration.

SUCCESSFUL MEETING OF WASHINGTON CHAPTER, ASAH

The first regular meeting of the Washington Chapter, ASAH, was held May 20. A group of fourteen present and prospective members enjoyed dinner at the Parrot Restaurant on Connecticut Avenue. The very discovery of a Washington restaurant willing and able to accommodate the group was an achievement of the first order for which the chairman-secretary, Alan Burnham, deserves hearty commendation.

After a discussion of plans for future meetings and organization, the group was privileged to hear a highly interesting and instructive talk by fellow-member, Myron Bement Smith, consultant on Islamic art and archaeology, Library of Congress, on "Iran: the Country and the Architecture." A discussion period followed.

Announcement of the next meeting will appear soon.

THORNTON SOCIETY FIELD TRIPS

The Thornton Society plans to continue its summer program of field trips to outstanding monuments in and around Washington--the first was a safari to Mt. Vernon--by a visit to the Capitol, under guidance of David Lynn, the architect in charge of its maintenance. The Society's campaign for members is proceeding with most encouraging results.

PHILIPSE CASTLE RESTORED

On July 4, 1943, historic Castle Philipse, at North Tarrytown, N.Y., was opened to the public as a Dutch colonial house museum. Frederic Philipse, master carpenter-architect to the Dutch West India Company, came to New Amsterdam in 1653 and soon was the colony's wealthiest citizen. He acquired his Lower Manor at Yonkers in 1672 and bought land in 1680 on the Pocantico River, ultimately enlarging his holdings to include land from Manhattan to Croton. Soon after, he built the Upper Mill with two millstones and an enormous storage space for grain waiting shipment to New York. About 1633 he added the stone "castle," massive but plain, to serve as an occasional residence. In 1785, a Philipse descendant built a clapboarded ell to the north, and subsequent owners, including Miss Elsie Janis (from 1920 to 1938), massacred it by adding a coat of stucco and Georgian revival details in the best 1910 manner. In 1938, the property was taken over by the

Tarrytown National Bank, and they sold it in 1940 to John D. Rockefeller whose Pocantico Hills estate lies nearby. Mr. Rockefeller provided funds for the restoration of the house, ell, smokehouse, and mill, and has placed it under the custodianship of the Historical Society of Tarrytown, whose president, Dr. Hugh Grant Rowell, was active in directing the work of renewal. In normal times, the house, facing the Albany Post Road, is easily accessible, and should be an important means of acquainting both historians and the public with seventeenth century building.

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ASAH AND THE WAR

Architectural historians are sometimes regarded as slightly "touched," living in ivy-covered, half-ruinous ivory towers, eating Roman bricks, sleeping on old books, and wearing half-timbered false fronts. Through the cracked window panes of this editor's refuge from the world, a survey of ASAH seems to indicate that our unpromising company has yielded surprising and unique services in the present emergency.

The first and most obvious are those with our armed forces. A quick check of our role reveals that eleven members are with the U.S. Army, and ten with the Navy, in other words, approximately twelve per cent of our membership. Eight members have made important and direct contributions in various war agencies. Two, especially, with detailed knowledge of particular foreign countries, have rendered irreplaceable service in the Office of Strategic Services. Several have aided in less romantic but quite as necessary governmental offices. One is serving in the Bolivian embassy. Five members have furthered the cultural rapprochement between the Americas, sponsored by our Department of State, three of them as exchange professors to Latin-American universities. Two of our members have entered war industries to contribute their bit. Other members, still civilians, are active in civilian defense, Red Cross, and in teaching in war training programs.

Lest anyone question the very real sacrifice these services entail, it should be pointed out for the record that for those who had been building enviable reputations in the highly competitive field of academic research and teaching, this break in continuity represents a hazard the seriousness of which is not fully apparent until years later. The loss to the field of architectural and cultural history is not less great. With building at a standstill for the duration, no profession has been harder used and less profitably redirected by governmental agencies than that of architecture. The schools of architecture have either been suspended or have seen their student body reduced to a meagre trickle.

Nevertheless, despite this necessary interruption of important work, and in addition to the ordinary patriotic duties which our membership gladly assumes, we can, no doubt, ourselves, discover ways to assist the common effort. One member, for instance, found that the intelligence services of the armed forces were delighted to obtain photo copies of his unique collection of 114 large scale (3 miles to the inch) maps completely covering France, Italy, the Low Countries, and Western Germany. Others have found stray snapshots eagerly wel-

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CURRENT BIBLIOGRAPHY IN ARCHITECTURAL HISTORY: January - May, 1943

Compiler: Ruth V. Cook, Harvard University.
Assistant: Islamic and Far East, Myron B. Smith, Lib. Congress.
Make-up: Turpin C. Bannister

Scheme of Classification

Bibliography

Periodicals

General: general histories, essays, exhibitions, views

Biography

Geographical: continents, countries, regions, towns, buildings

Chronological: period, century, year

Building Types: agricultural, commercial, residential, etc.

Structural: materials, structural systems, details, equipment.

Aesthetic: organization patterns, details, ornament, decor. arts.

Professional: arch.education, professional administration, econ.

Preservationism: damaged monuments, preservation, reconstruction.

Reviews of architectural books.

BIBLIOGRAPHY

PERIODICALS

GENERAL

- 1 Amer.Soc.Arch.Hist.; Washington Chapter, __, gets under way
(JASAH v.2, p.40 O'42)
- 2 Archaeology, field methods, development and application;
Wissler, Clark; The Archaeologist at work. N.Y., Am.Mus.
Natl.Hist., 1943. Guide leaflet ser.#116.16 p.11.
- 3 __; How science deciphers man's past. by Clark Wissler il.
diags.(Natural Hist.v.51,p.120-34, Mr'43)
Exhibitions; Albany, N.Y., see 67.
- 4 __; Cambridge, Mass., Fogg Mus.art; Masters of four arts;
Wright, Maillol, Picasso, Stravinsky, an exhibition May 4-
29, and concert May 7. Cambridge, Fogg Mus. of Art, Har-
vard University, 1943. 21 p. il.
- 5 __; London, Guildhall library; A London event, an __ of draw-
ings and prints at __. il (Arch. and Bldg. News, v.174,
p.166-7, F 26 '43)
- 6 __; London, Royal Academy; R.A. exhibition, revised RA plan for
London. il.plans (Archts. Jl. v.97, p.316-8, My 13 '43)
__; see 32
__; Jefferson see 15
tradition, process of architectural See R 9

BIOGRAPHY

- 7 Blomfield, Sir Reginald T.; Obituary (Arch.Rev. v.93,xxxv-vi F'43)
- 8 __; Death of __ (J ASAH v.2,p.42 O'42)
- 9 __; Tribute to __. by A.T. Edwards (J RIBA s.3,v.50,p.88 F'43)
- 10 __; List of buildings designed by __. compiled by A. Blomfield
(J RIBA s.3, v.50, p.88-9 F'43)

- 11 Borie, Charles L., Jr.; obituary (Arch.For. v.78, p.126 Je '43)
Casas, Fernando de See 49
- 12 Dougill, Wesley, 1893-1943. by J.H.Forshaw (J RIBA s.3,v.50
p.114-5, Mr '43)
- 13 Gil de Ontanon, Juan and Rodrigo; sobre los arquitectos y
Juan de Rasines (Archiv.Espan.Arte, no.45,p.315-7, My '41)
- 14 Jefferson, Thomas; Ward, Clarence; as architect. Oberlin, O.,
Oberlin College Publicity Bureau, 1943. 5 p. mimeog.
- 15 bi-centennial exhibition (J ASAH, v.2, p.41 O '42)
- 16 —, patron of the arts. by M.G.Kimball il.port (Antiques
v.43, p.160, 164-7, Ap '43)
- 17 —; Kimball, Marie: the road to glory, 1743-1776, N.Y.
Coward-McCann, 1943. 358 p. il.
Mansart, Francois. see R 7
- 18 Melzer, Roman, obituary. (Arch.For. v.78, p.126, Je '43)
- 19 Michelangelo; Tolnai, Karoly: —, vol.1, the youth of —.
Princeton, Univ.Press. 1943. 295 p. 293 plates. Bibliog.
Paty, James. See 29
Rasines, Juan de. See 13
- 20 Rodriguez, Ventura, y la escuela barroca romana. by F.Chueca.
il.plans (Archiv.Espan.Arte no.52. p.185 '42)
Taylor, Augustine. See 92
- 21 Wright, Frank Lloyd: An Autobiography. N.Y., Duell, Sloan, &
Pearce, 1943. 356 p. 1 il.
See 4

GEOGRAPHICAL

EUROPE

France

- Mansart, Francois. See R 7
- 22 Paris; Madeleine and Notre-Dame; Sermon in stone, comparison
between the classical church of St. Mary Magdalen and
the Gothic cathedral of Notre-Dame, Paris. by E.Fitz-
gerald (Catholic World, v.157, p.311-3, Je '43)
 - 23 Tours, S. Martin; Church of Saint-Martin at Tours (903-1150)
by C.K. Hersey. bibliog. pls. plans. diags. (Art. Bul.
v.25, p. 1-39, Mr '43)

Germany

- 24 Palaces, imperial; Schlag, Gottfried: Die deutschen kaiser-
pfälzen. Frankfurt-a-M, V.Klostermann (1940). 17 pl.
16 il. and plans.

Great Britain

- See 7, 8, 9, 10 (Blomfield); 12 (Dougill); 89 (post-war bldg.).
- 25 archaeology, Roman; Britain in 1941: sites explored: inscrip-
tions. plans. diags. (J.Rom.Stud.v.32,p.107-19, plates '42)
 - 26 Abbots Langley (Herts.), The king's lodge. il (Country L.
Lond. v.93, p.660-3, Ap. 9 '43)
 - 27 Avebury (Wilts.) restored. airview (Country L. Lond. v.93,
p. 608-9 Ap. 2 '43)
 - 28 Babington (Somerset). by C.Hussey. il. (Country L. Lond v.93,
p. 704-7, Ap. 16 '43)
 - 29 Bristol. First state theatre in England, opened 1766, archt.,
James Paty. il (Archts. J. v.97, p. 325, 328-9, My 20 '43)

- 30 Castle Dore; Iron age enclosure, airview; New approach to the past, the science and romance of archaeology (Country L. Lond. v. 93, p.354-6, Ap.9 '43)
Clanfield, Iron age enclosure, airview. See 30
- 31 Eversley Manor (Hamps), I,II. by C.Hussey. il (Country L. Lond. v.93, p. 528-31, 572-5, Mr 19, 26 '43)
Holnicote estate (Devon) See 97
Killerton estate (Somerset) See 97
London, exhibitions. See 5 (Guildhall), 6 (Royal Acad. plans)
- 32 —: London plans revised, architecture at the Royal Academy summer exhibition. Il. plans (Country L. Lond. v.93, p. 878-9, My 14 '43)
—, 19th C. model housing. See 91
- 33 —, Abingdon Street, 18th C. houses to be demolished. views (Archts. Jl. v. 97, p.249,251 Ap 15 '43)
Maiden Castle (Dorset), airview. See 30
- 34 Mells (Somerset), The manor house, the village, I,II. by C.Hussey. map. il (Country L. Lond. v.93,p.748-51, 792-5, Ap 23,30 '43)
Nonesuch palace, wall decoration. See 93
- 35 Richmond; No.4 Maids of Honour Row. by C.Hussey. il (Country L. Lond. v.93, p.968-71, My 28 '43)
- 36 St. Germans (Cornwall), Strange almshouses. il (Country L. Lond. v.93, p. 801, Ap 30 '43)
- 37 Wales; Gwysaney (Flints), I,II. by C.Hussey. il.plan (Country L. Lond. v.93,p.880-3,924-7 My 14, 21 '43)

Greece

- 38 Recent Greek and Roman archaeology. by G.M.A.Richter (Am. Scholar, v.12, p.243-7, Ap '43)
- 39 Athens, Parthenon; Die basilika im —. by F.W.Deichmann. bibliog. footnotes. plates (Deutsch. Archaeol. Inst. Mitl. Athen. v.63-64, p.127-39, 1938-9: English abstract Am.J. Archaeol. v.49, p.120 Ja '43)
- 40 —; Curve of the north stylobate of the —. by G.P. Stevens. diags. (Hesperia, J.Am.School of Class.Stud. Athens. v. 12, p.135-43 Ap-Je '43)
- 41 Corinth, Christian basilica near the Anchreon gate at —. by J.M.Shelley. il.plans.persp. (Hesperia, J.Am.S. of Class.Stud. Athens. v.12, p.166-189, Ap-Je '43)
- 42 Micyberna; Excavations at —, 1934,1938. by G.E.Mylonas. bibliog. footnotes. il.plans (Am.J.Archaeol. v.47,p.78-87, Ja '43)

Italy

- See also 19 (Michelangelo), 38 (Roman archaeol), 50 (Ital. precedent in Escorial dome), R 10 (Roman architecture, classicistic to late Empire)
- 43 Etruscans, Who were the —? The evidence of architecture and sculpture. by G.M.A.Hanfmann (Am.J.Archaeol. v.47, p.94-100, Ja '43)

Portugal

- 44 Alcobaca; Vahela Aldemera, Luis: — ilustrada; un estudo critico, programa, relatorio, catalogo e estampas.

Russia

- 45 St. Petersburg; Marsden, C: Palmyra of the North, the first days of. London, Faber and Faber, 1943. 280 p. illus. portrs.

Spain

See also 13 (Juan and Rodrigo Gil de Ontanon, Juan de Rasines); 20 (Rodriguez); R 11 (11th C. Romanesque).

- 46 Asturias; Castros preromanos de la region cantabrica. by A. Schulten. bibliog. footnotes. il.dings. (Archiv.Espan. Arqueol. no.46, p.1-16 Ja '43)
- 47 Brihuega; La capilla del castillo de ___ y las edificaciones de Don Rodrigo Jimenez de Rada. by L.Torres Balbas. bibliog. footnotes. plates. plan. diag. (Archiv. Espan. Arte, no.45, p.279-97, My '41)
- 48 Burgos; Monastery of Las Huelgas; plasterwork; Las yeserias descubiertas recietamente en Las Huelgas de _____. by F. Iniguez. plates (Archiv.Espan.Arte no.45, p.306-8 My '41)
- 49 Coruna; La iglesia de Capuchinas de la ___, obra de Fernando de Casas. by M.C.Lamos. il.plan (Archiv.Espan.Arte, No.52, p 222-30 '42)
- 50 Escorial; Sobre la cupula del ___ y sus precedentes italianos. by H.Lorente Junquera. bibliog. footnotes. 6 pl. (Archiv.Espan.Arte, no.46, p.377-83, Jl '41)
- 51 Galicia; Ejemplares arquitectonicos del románico popular en _____. by M.C.Lamos. plates (Archiv.Espan.Arte, no.46, p.338-44 Jl '41)
- 52 Liria; Notas sobre las ultimas excavaciones de San Miguel de ____; trabajos del servicio de investigacion prehistorica. by I. Ballester Tormo. pl. (Archiv.Espan.Arqueol. no.44, p.434-8 Jl '41)
- 53 Pamplona; La historia de Job en un capitel romano de la catedral de _____. by L. Vasquez de Parga. plates (Archiv. Espan.Arte, no.46, p.410-1, Jl '41)
- 54 Salamanca; La iglesia de las Bernadas de Jesus en _____. by J. Camon Aznar. plates plan (Archiv.Espan. Arte. no.46, p. 407-9, Jl '41)
- 55 Santiago de Compostel; La catedral medieval de _____. by K.J.Conant. 6 plates (Sobretiro de Cuadernos Americanos, Mexico, ano II, no. 1)
- 56 Segovia, Alcazar; La sala del solio en el _____. by J.C. y L. de A. de Lozoya. plates (Archiv.Espan.Arte no.46, p. 261-71, My '41)
- 57 Valladolid, Monastery of Las Huelgas; la documentacion de retablo de _____. by E. Garcia Chio. facsim. (Archiv. Espan.Arte, no. 51, p 151-3, My '42)

AFRICA

Egypt

Deir el Bahri, excavations, 1911-31. See R 5

Morocco

- 58 Monedas numido - mauritanas procedentes de las excavaciones en la zona espanola de Marruecos. by P.Quintero. plates (Archiv.Espan.Arqueol. no.46, p.63-71 Ja '42)

ASIA

India

Buddhist and Hindu architecture, See R 6

Palestine

- 59 Archaeological activity in _____ and Transjordan in 1941-42 (Am.J.Archaeol. v.47, p.125-31 Ja '43)
60 Jerusalem; The El-Aqsa mosque in _____ by R. Hamilton (Am.J. Archaeol. v.47, p.129-30, Ja '43)

NORTH AMERICA

United States

- See also 11 (Borie), 14, 15, 16, 17 (Jefferson), 18 (Melzer), 4, 21 (Wright)
61 architecture and interior decoration, 1860; Martin, Edgar W.; Standard of living in 1860. American consumption levels on the eve of the Civil War. Chicago, U. of Chi. Press, 1942. 451 p.
62 Eastern seaboard, 1810; Ralph H. Brown; Mirror for Americans, likeness of the _____, 1810. N.Y. Amer. Geogr. Soc., 1943 (A.G.S. Special Pub. 27) XXXIV 312 p. 37 ill. 32 maps

U.S., Northeastern States

- 63 Massachusetts, Gloucester, Beauport estate; New England society given two homes, _____, and Lady Peperell house, Portsmouth (Mus.N. v. 20, p.5, Ap 15 '43) _____, Lowell. See R 8
New Hampshire, Portsmouth, Lady Peperell house. See 63

U.S., Middle-Atlantic States

- 64 Maryland; "Mattaponi" goes to war, an old brick plantation house (J. ASAH v.2, p.41-2, O'42)
65 New Jersey, Elizabethtown; Patriot and his home; Baudinot mansion in _____ by W.F. Davidson. 11 (Antiques, v.43, p. 220-_____, My '43)
66 New York; Early town planning in _____ State. by Turpin C. Bannister. plans (New York History, v.24, p.185-95 Ap '43)
67 _____, Albany; Historic State Street (Mus.N. v. 21, p.2, My 15 '43)
68 _____, New York; Nineteenth century _____ interiors, eclecticism behind the brick and brownstone. by Ruth Ralston. 11 (Antiques v. 43, p.266-70 Je '43)
69 _____; New York Produce Exchange in 1867; lithograph (N.Y.Hist.Soc. Bul. v.27, p.29, Ap '43)

U.S., South-Atlantic States

- 70 South Carolina, Charleston, Manigault house; Restoration of the _____ by B. St.J. Ravenal (J.ASAH, v.2, p. 30-2, O'42)
71 Virginia, Williamsburg, Governor's palace; The palace, _____, seat of the governors of Virginia reconstructed. by R.J.H. Shaw. 11.plan (Country L.Lond. v.93, p. 616-9, Ap 2 '43)

U.S., North-Central States

- Illinois, Chicago, balloon frame. See 92
- 72 Michigan, Detroit; _____ reviews its architecture. by B.L. Pickins (J.A.S.A.H. v.2, p. 42-4 O'42)
- 73 _____; Early city plans for _____, a projected American metropolis. by B.L. Pickins. il. plans (Art Quarterly, v.6, no.1, p.34-51 Winter '43)
- 74 _____, Grand Rapids; American pattern, _____. (House and Garden v.83, p.49-53, My '43)
- 75 Wisconsin; Wisconsin Conservation Dept.: Old buildings, historic spots, and books about _____. Madison, Wis., (1941) 5 p. mimeog.

CENTRAL AMERICA

Mexico

- 76 Archaeological investigations of the Carnegie Institution of Washington in the Maya area of Middle America during the past twenty-eight years. by S.G. Morley. bibliog. footnotes. il.map (Amer. Philos.Soc.Proc. v.86, no.2, p.205-19 '43)

Santo Domingo

- 77 The Gothic architecture of _____. by Thos. T. Waterman. il.plans (Bul.Pan-Amer.Union,v.77,p.312-25 Je '43)

SOUTH AMERICA

Argentina

- 78 Album de proyectos de arquitectura moderna. Buenos Aires, Ediciones Anaconda, 1941 (2 ed.) 184 p. illus,plans, plates, tables.
- 79 Arquitectura moderna, ano.1940 (Buenos Aires,I.Aresti, 1939) 158 p.illus. plans. diags.
- 80 Catamarca; Buschiazzo, M.J.: Por los Valles de _____. Buenos Aires, 1942. 14 p. 88 pl. (Part VII, Documentos de Arte Argentino, Publicaciones de la Academia Nacional de Bellas Artes) Text in Spanish, English, French.
- 81 Cordoba; En los senderos misionales de la arquitectura Cordobera. Buenos Aires, 1942. 120 pl (Part XV, Documentos de Arte Argentino, Pub.de la Acad. Nac. de B.A.)
- 82 La Trayectoria Puneña y el Barroco Jesuitico. Buenos Aires, 1942. 26 p. 64 pl. 1 map (Part XIV, Documentos de Arte Argentino, Pub. de la Acad. Nac. de B.A.)
- 83 Salta; La ciudad de _____. Buenos Aires, 1942. 110 pl (Part VII, Documentos de Arte Argentino, pub. de la Acad.Nac. de B.A.)
- 84 Virrey; La Casa del _____. Buenos Aires, 1942. 17 p. 64 pl. (Part XIII, Documentos de Arte Argentino, Publ. de la Acad. Nac. de B.A.)

Brazil

See also R 1

- 85 On architecture and architects. by B. Rudofsky. il (Pend 1 P. v.24, p. 62-4 Ap '43)
- 86 Belo Horizonte, New architecture at _____. by P.L. Goodwin. il.plans (Mag.Art, v.36, p.90-3, Mr '43)

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87 The Humanistic approach to modern architecture. by Paul Zucker.
(J.Aesthetics, v.2, no.1, p.21-6, '42)

88 Post-War building; architecture after the peace. by Joseph
Hudnut (Mag.Art, v.36, p.122-7, Ap '43)

89 —; Mumford, Lewis: The social foundations of post-war
building. London, Faber and Faber, 1943. (Rebuilding
Britain series, No.9)

Gt. Britain: 6, 32 (London, Royal Acad. plan); 7,8,9,10 (Blomfield);
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90 Will the castle come back? by I.G.Walker. il (Landscape Arch. v.33, p. 41-4, Ja '43)

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Religious: Sanctuary: 27 (Avebury); Temple: 40 (Parthenon); Mosque: 60 (Jerusalem, El-Aqsa); Christian Churches: R 2 (early medieval); 22 (Notre-Dame and Madeleine, Paris); 23 (Tours, S.Martin); 39 (Basilica, Parthenon); 41 (Corinth, Basilica); 55 (Santiago de Compostel, Cathedral); 77 (Santo Domingo); 81 (Argentina, Cordoba, missions); 82 (Argentina, Jesuit baroque).

Residential: Palaces: 24 (German imperial); 56 (Segovia, Alcazar); 71 (Williamsburg, Governor's Palace); 77 (Santo Domingo); 93 (Gt. Britain, Nonesuch Palace). Houses: 33 (London, Abingdon St., 18th C.); 63 (Beauport estate, Gloucester, Mass. and Lady Peperell house, Portsmouth, N.H.); 64 (Mattaponi, Md.); 65 (Baudinot mansion, Elizabethtown, N.J.); 68 (N.Y.C. 19th C. interiors); 70 (Charleston, S.C. Manigault house).

Low-Income Housing See also R 8 (Lowell housing)

91 Model houses for the labbring classes, slums of 100 years ago. by N. Feysner. il.plans.portrs. (Arch.Rev. v.93, p.119-28, My '43)

STRUCTURAL

Structural Systems, wood.

92 Balloon frame; A reexamination into the invention of the . by Walker Field. Bibliog. footnotes. il. (J. ASAH. v. 2, p. 3-29, O '42)

AESTHETIC

See also 22 (comparison of Madeleine and Notre-Dame, Paris); 40 (stylobate curve, Parthenon); 68 (19th C.interiors, N.Y.C.); 53 (Romanesque capitol, Cathedral, Pamplona)

Decorative Arts

93 Architectural design for Henry VIII; decoration of a wall, probably in Nonesuch Palace. by O. Kurz. bibliog. footnotes (Burl.M. v.82, p.80-3, Ap '43)

PROFESSIONAL

Education

94 Architectural training in three dimensions (Univ. So. Calif). by Clayton M. Baldwin. il (Calif.Arts and Arch. v.60, p.36-7, My '43)

95 18th C. indenture; Recruitment for the building trade; Comment and illus. of an indenture, 1761. (Arch. and Bldg. News, v. 174, p. 52-3, Ap 23 '43)

PRESERVATION

Damage to Historic Monuments see 33 (London, Abingdon St., 18th C. houses)

Preservation

- 96 Washington, D.C.; Thornton Society established (J.ASAH, v.2, p. 41 O'42)
97 Acland gift to the National Trust; the Killerton and Holnicote estates, in Somerset and Devon. (Arch. and Bldg. News, v. 174, p. 182, Mr 5 '43)
See also 27 (Avebury restored); 65 (SPNEA gets Beauport estate, Gloucester, Mass., and Lady Peperell house, Portsmouth, N.H.); 64 (Mattaponi, Md., restored); 70 (Manigault house, Charleston, S.C., restored); 71 (Williamsburg, Va., Governor's Palace, reconstructed)

REVIEWS OF ARCHITECTURAL HISTORIES

- R 1 Brazil Builds; architecture new and old, 1652-1942. by P.L. Goodwin. (Arch. and Bldg. News. v. 174, p. 43-6, Ap 16 '43 by Howard Robertson) (Arch. For. v. 78, p. 12 Ap '43)
R 2 Brief commentary on early medieval church architecture, with special reference to lost monuments. by Kenneth J. Conant (Arch. and Bldg. News, v. 174, p. 134-5 My 28 '43) (J. ASAH v. 2. p 33-5 O'42 by Carl K. Hersey)
R 3 Can our cities survive? by J. L. Sert (J.ASAH, v. 2, p. 37-9 O'42 by Carl Feiss)
R 4 The city--its growth, its decay, its future. by Eliel Saarinen. (Arch. For. v. 78, p. 12, 104 Je '43)
R 5 Excavations at Deir el Bahri, 1911-1931. by H.E. Winlock (Am. J. Archaeol. v. 47, p. 132 Ja '43)
R 6 Indian architecture, Buddhist and Hindu. by P. Brown (London Studio, v. 24, p. 63 F '43)
R 7 Mansart, Francois, and the origins of French classical architecture. by A. Blunt (Art. Bul. v.25, p.86-8, Mr '43. by John Coolidge)
R 8 Mill and mansion, a study of architecture and society in Lowell, Massachusetts, 1820-1865. by John P. Coolidge. (J. Aesthetics. v. 2, no. 1, p. 78 '42) (J. ASAH v. 2, p. 35-6 O '42 by C.L.V. Meeks)
R 9 The process of architectural tradition. by W.A. Eden (J.RIBA, ser. 3. v. 50, p. 116-7 Mr '43, by S.C. Ramsey)
R 10 Roman architecture from its classicistic to its late imperial phase. by A. Boethius (Am.J.Archaeol. v.47, p.141 Ja '43)
R 11 Spanish Romanesque architecture of the eleventh century. by W.M. Whitehill. (Archiv. Espan. Arte, no. 49, p.64-5 Ja'43)

ASAH AND THE WAR

(continued from page 48)

comed. Few societies have such a high proportion of globe trotters as does ASAH; members who have visited enemy countries should search their files for information that might make their conquest easier. Communicate with either service if you find anything that might be useful. They will copy it and return the original intact.

THE PLACE OF ARCHITECTURE IN A WARTIME COLLEGE CURRICULUM

Early last year, the U.S. Office of Education appointed a Committee on the Adjustment of the College Curriculum to Wartime Conditions and Needs, with Lloyd E. Blauch, senior specialist in Higher Education, as chairman. This committee in turn has been assisted by special committees in the several fields of studies. Report #12 by the Committee on Art should interest members of ASAH. The Committee included ASAH member, Sumner McK. Crosby, of Yale, as chairman, and other ASAH members, Richard M. Bennett, Bartlett H. Hayes, Jr., and Henry R. Hope. Excerpts are reprinted here by permission.

Art as a Wartime Study

A nation at war presupposes a nation at peace, granting, of course, the total and finally successful effort of a people to achieve victory. Yet if certain liberties which are temporarily sacrificed in order to achieve this victory are not to be lost forever, contact with the basic principles of individual freedom and of individual responsibility must be maintained. And if war is not to become even more a loss of conscience than it already is, contact must be maintained with the traditions of one's own nation as well with what is greatest in all other nations-- even the enemy's. The arts as an integral part of any culture provide a visual, objective means of evaluating the most significant achievements of past civilizations and of contemporary peoples.

It is true that to the practical minded art may appear to lie in a sphere widely separated from the realities of war. The continued teaching of art in our colleges and universities cannot, however, be considered a luxury. The War Department of this country has made it possible for qualified young men to obtain a liberal education as part of their preliminary training for responsible positions in the active military forces. Since art is recognized as an important part of a liberal education, art departments must continue to function along with other college departments.

Instruction in art is not limited to the training of professional painters, sculptors, architects, teachers, or scholars--who are actually of minor importance in the immediate war effort. In the present crisis the study of art can give many people a clearer understanding of what their country stands for than, say, the study of statistics. Certain individuals can develop initiative, responsibility, and an alertness to their surroundings more easily through the arts than through any other form of training; because of this they will be better soldiers and citizens. The arts, indeed, can demonstrate to soldiers and workers the essential values of all culture--of what they are fighting for and working to preserve.

An example of the powerful effect of art in shaping public opinion and even more in the very molding of individual minds can be seen in the use made of art by the Axis powers. The "arts" of these countries have become at once the expression of and the propaganda for the complete domination of the state, and in this process art has lost all but its technical shell. In Germany painting and sculpture are designed to serve the army as emotional propaganda to increase the birth rate; in Italy architecture is supposed to glorify Mussolini-Caesar. But true art cannot be thus dictated. It must rather be the free and voluntary expressions of peoples and cultures.

The importance of art in civilian morale is widely recognized. This country could well benefit by experiments successfully tried out in England, where traveling exhibits with informal lectures and discussions, as well as circulating groups of trained actors and musicians have played an important role in providing healthy stimulating recreation for all types of people. It is possible as the tension increases in this country that more and more use can be made of the arts for this purpose.

For undergraduates, most of whom are now faced with an accelerated program of study, art courses may provide a necessary counterbalance to the scientific and technical courses imposed by premilitary training. Evidence of the demand for such courses is to be found in the noticeable increase of students desiring to audit lecture courses in art, even when their time is almost entirely occupied in fulfilling military prerequisites.

The Army has, likewise, recognized the value of art as a part of the special service activities. Soldiers are being encouraged to decorate recreation and living quarters in the camps and to make drawings or paintings of military life. Students, trained in the arts, can participate in these activities when they are in the armed forces.

Attention should be called, nevertheless, to the danger of overemphasizing the function of art in a nation at war. In recent months, there has been a tendency, apparent particularly in articles published in newspapers and magazines, to dramatize and emotionalize the contributions of the arts in wartime. Such efforts more often than not detract from the positive effect inherent in art instruction.

It may be said that in wartime one of the most significant contributions of the arts is that of sustaining the human spirit in the presence of a great human tragedy. Although it is impossible to foresee the conditions and demands of the post-war period, it can certainly be assumed that the reconstruction and the establishment of a stable world order will require all the tolerance and understanding of which man is capable. The fact that art education is based on comparative values and has as its subject matter cultural history means that art has a very direct bearing on the "winning of the peace". The goal of art instruction lies deeper than individual stimulation or recreation. The civilian population, as well as the younger men in active service, will in large part make up the public opinion behind any peace treaty. They must have here and now something more than art for the sake of morale. They must have the arts presented as the means to an understanding and a tolerance of other patterns of living than their own, as well as to an understanding of the real issues of this war in terms of human dignity and worth.

In order to achieve these objectives, it is universally agreed that a normal approach stressing the basic fundamentals must be maintained. The introduction of new "war" courses or the overemphasis of military problems in art curricula, except in the few instances listed below, can contribute very little to the war effort. In fact such overemphasis runs the danger of losing sight of those enduring human values which are the especial province of art instruction. Teachers of art in this country must never forget their profound responsibility in the preservation of an appreciation and understanding of the cultural significance of our civilization and its democratic ideals. They should also remember that it is the broad, general aspect of their instruction that will inspire a larger number of students.

The objectives of art instruction at this time can be summarized in the following manner: First, an emphasis of art, past and present, as part of all civilized existence and as a basis for visual recognition of the most significant human achievement; second, a development of individual talents that will be of use to the armed forces as well as to civilian defense; and third, a specialized training of a very limited number of outstanding young men, who may be particularly fitted to perform some specific task either in military or civilian life.

Specific Contributions of the Different Approaches to Art Instruction

A survey of the art courses offered by the colleges of this country in the last few years proves that art instruction has tended to accent

the study of the great epochs of the past-- Ancient, Medieval, and Renaissance. Although a knowledge of the masterpieces of these periods must necessarily be included in the training of all students, it should be recognized that in the present crisis the value of the arts as embodying and clarifying a civilization and a way of life is often more forceably demonstrated in the art of those periods that lead directly to the modern world, and of course particularly in the art of America. Art instruction has also tended to emphasize painting at the expense of architecture. But today the study of architecture provides a training in the recognition and retention of the significant features of buildings, site-plans, and city lay-outs that can be of direct use to a future soldier.

Above all, instruction in art provides a fundamental training in how to make intelligent use of one's eyes and one's hands in everyday life. The arts can serve every student by stimulating and developing visual perception and manual skills, usually neglected in the predominantly verbal education of our high schools and colleges. In counteracting this verbal bias the arts promote an alertness and a control which are essential on the production lines and on the fighting fronts.

In order to stress the immediate contributions of art instruction to the war effort-- even though such contributions may be of minor significance--the following categories have been chosen: Military, Civilian and Industrial, and Cultural. It has also seemed advisable to indicate only the general methods of achieving the objectives, allowing latitude in the manner of integrating them into different courses according to the facilities available in a given locality. Teachers should note that many of the contributions listed are not the aims of art education. They are the services which can be performed most readily by those who have acquired certain skills as a result of such instruction.

I. Historical and interpretative courses. The study of historical and contemporary styles in architecture, painting, sculpture, and the so-called minor arts can give an officer or a soldier a positive understanding of the different peoples of the world, with some of whom he must inevitably come in contact. Familiarity with the architecture and art of foreign lands will enable men to adjust themselves more rapidly to new and often totally strange surroundings, and a knowledge of the past and present art of foreign peoples is an invaluable aid in gaining a better appreciation and understanding of their cultures and achievements.

A. Military: (1) Preliminary training in the analysis of photographs. A descriptive vocabulary must be developed and a student must be able to recognize forms in space as well as to select quickly the most important characteristics of a building or object as seen in a photograph, that is, to see and think objectively. The methods of judging scale, proportions, and relative distances in two dimensions must be demonstrated. Precise accurate observation of a few objects should be stressed as well as the ability to recognize at a glance similar features in a number of different objects.

(2) Increased visual response to a new environment. By studying a number of different works of art, a student can be taught to react more quickly to new surroundings and to increase his visual memory.

(3) Increased knowledge of foreign lands and peoples. This does not imply that courses should be travelogues, but familiarity with the important monuments of different lands as well as an appreciation of the cultures that created them can be of especial value to officers as a training in the deductive and inductive use of their visual powers. Such a knowledge should result from any well integrated introductory course.

B. Civilian and Industrial. The contributions here are closely allied to the cultural aspects outlined below. Of specific value is the

possibility of arranging exhibits in both civilian and industrial centers. Preliminary training for this can easily be accomplished by requiring students to arrange and label small exhibitions of photographs in connection with courses.

C. Cultural: It is in this category that historical and interpretative courses can make their most important contributions. The fundamental values have already been mentioned in the first part of this report. The opportunity of comprehending in an objective manner the most important traits of our own civilization and of other civilizations is an essential part of a liberal education. Relatively few other college courses provide as direct a means for such a comprehension. The history of art is not a chronological listing of masterpieces, nor is it merely an adjunct to other historical studies. Details of attribution, of chronology, of incidental significance should be subordinated to the more essential humanistic evaluation of a given style or group of objects. A careful interpretation of the objects themselves can demonstrate the basic unity and interdependence of the individual parts that are as important to art as they are to a democratic existence. Not only does such instruction widen one's horizons, and quicken one's senses, but it also creates a sounder responsibility for the future establishment of world order.

II. Courses in creative painting and sculpture.

III. Courses in architecture. It should be remembered that the following contributions are for the most part included in the regular basic training for architectural students, and except in two instances should not entail the establishment of new courses.

A. Military: (1) Construction: Students of architecture can best use their special training in aiding in the design and construction of buildings for military use. Courses in structural mechanics and design can augment the treatment of standard materials by pointing out the differences between peacetime procedures and the conditions met in emergencies to be solved with whatever materials may be at hand. Special emphasis is being placed on rapid construction in wood, layout of utilities, sewage disposal, and such scientific problems as hospitals built in accordance with military and naval specifications.

(2) Combat engineers: Preliminary training for this branch of the service exists in such instruction as site planning, planning of communications, and circulation, and in surveying and topographical map making. No new courses are necessary, although surveying and map making, as part of the regular basic training, are being emphasized.

(3) Model making: Special training in topographical model making is of particular value in many branches of the service.

(4) Camouflage: As in painting, certain basic training can be of use here. But as far as military camouflage is concerned the Army does not encourage the introduction of special courses in the schools. The architect's training in design and construction in three dimensions is particularly valuable here.

(5) Photographic interpretation. As in the history of art, preliminary training for this work can be acquired through the regular courses--in particular those relating to city planning.

B. Civilian and industrial: (1) Industrial camouflage. New courses are being organized at the request of the Office of Civilian Defense, many of which are being based on the training program of the camouflage school at Fort Belvoir, Va. These may be offered as extension courses open both to students and to the practicing architects in the community.

(2) Civilian defense problems: New courses in structural air raid protection are being given in conjunction with the Office of Civilian

Defense. Emphasis is also being placed on the design of dispersion of plants, communities for evacuation areas, and the survey of cities for safe areas.

(3) Industrial building: Problems in designing and building war production factories, with particular emphasis on war housing, are being introduced into regular courses.

(4) Engineering and aeronautical drafting: Standard courses in drafting can sometimes be altered to provide preliminary training in these fields.

(5) City planning: The foundation of new city plans for the immediate future and for the post-war era is one of the fundamental problems confronting the architect today.

C. Cultural: Here the architect shares the responsibility of other creative artists. His training, based on organization and good planning, often results in a clear understanding of the order demanded in social existence, and suggests practical means of achieving it. An architect studies natural and human environments, relates them to human ideals, and then transforms them into three-dimensional reality.

IV. Departments of Drama.

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BOMBS AND BASILICAS

The inextricable tangle of legitimate targets and antique cultural monuments that is modern Rome has brought partial damage to one of the most venerable Christian shrines. In the first bombing of Rome, on Monday, July 19, American bombardiers attacked the railroad yards on the eastern city line, immediately neighboring the ancient basilica of San Lorenzo fuori-le-mura. Fortunately the area has few other cultural sites, but unfortunately, despite extremely careful preparation to avoid injuring important monuments, San Lorenzo itself was badly damaged. Notwithstanding anguished Fascist and Nazi wailings, Pope Pius refused to denounce the raid, and the Vatican stated that only the western front had been wrecked and that the ancient crypt stands unharmed. The raid followed a long, but fruitless campaign by United Nations leaders to have Rome made an open city. The fate of another ruin adjoining the tracks, the so-called Temple of Minerva Medica, supposedly a nymphaeum in the Licinian gardens, is unreported.

While no doubt great and irreparable losses to familiar monuments have been incident to bombings of Naples and Palermo, some consolation may be derived from the fact that Catania, Messina, and Foggia have so often been wrecked by earthquakes that few significant structures had remained. ASAH recognizes the inevitable and terrible destruction brought by war -- especially this one. For the innocent and silently suffering monuments, the outrages of war are equalled only by the neglect and vandalism of peace.

ALBANY EXHIBITS ITS HISTORIC STATE STREET

The Albany Institute of History and Art, J.D.Hatch, Jr., director, is holding a special summer show on Historic State Street. Included are a series of old maps tracing city growth, 14 original watercolor views by James Eights, paintings by Thomas Cole, William Hart, and William H. Bartlett, and a superlative group of scale models by Paul Schrodt of the Dutch church, second city hall, Hooker's Capitol and City Hall, and block groups of the North side of State and the west side of North Pearl Streets.

